take advantage of the fact that such reliefs were not shown in the application of the Long patent, which was in interference with him, and obtained claims seeking to cover the Long piston as well as others.

If the claims are taken as they read, which they should be, as shown under I above, then they are anticipated by the Long pistons, whether or not these had flexible webs. They are, however, likewise anticipated by the Long pistons, even if flexible webs are read into the Jardine claims, because the Long pistons in use prior to the time that Jardine filed had flexing webs, and it is immaterial whether the scientific explanation of the operation of the Long piston was known.

III.

The Court Below Erroneously Ordered the Issuance of an Injunction Restraining Petitioners From the Sale of Pistons Like Exhibit 1, Which Is All Aluminum.

Respondent has no such interest in the Jardine patent as to entitle it to an injunction. It is elemental that an injunction should not issue unless the party claiming it can show a definitely threatened invasion of one of his rights. The right which is invaded or violated must be a right of the Plaintiff, and not a right of some one else.

If Respondents should do what Petitioners did (sell aluminum pistons like Exhibit 1) Respondent itself (under the decision of the Court of Appeals) would be infringing the Jardine patent, because in the very same instrument whereby Respondent acquired title to the Jardine patent (Exhibit 38b, paragraph XXII, R. 1391) Respondent transferred to the Aluminum Company of America the exclusive right to make, use and sell aluminum pistons (Exhibit 38, R. 1382).

As far as aluminum pistons are concerned, therefore,

neither Respondent, nor the Trust Estate which it represents, ever has had the right under the Jardine patent to make, use or sell, or to exclude others from so doing. Having no such right, it is not entitled to an injunction.

The question here is not whether the Aluminum Company of America is an exclusive or nonexclusive licensee, as the Court of Appeals seems to have thought. Admittedly there are two licensees (other than the Aluminum Company of America) under all the eighty-odd patents held by the Trust Estate. The controlling fact here is that neither Respondent, nor the Trust Estate which it represents, ever has had those incidents of ownership in the Jardine patent which are necessary to entitle it to an injunction when suing alone. Regardless of how many licensees there may be, only Respondent, The Cleveland Trust Company, is in court as plaintiff, and that plaintiff has not the right to make, nor the right to sell, nor the right to use, aluminum pistons, nor does it have the right to license others so to do, and consequently Respondent can have no right to an injunction.

While this question of patent law is novel in so far as this Court is concerned, it has been considered by the lower Federal Courts in Kaiser v. General Phonograph Supply Company, 171 Fed. 432, and Doherty Research Company v. Vickers Petroleum Company, 80 Fed. (2) 809. In both cases it was held that a mere title holder,* such as Respondent here, was not possessed of those rights which are essential to entitle a party to maintain a suit in equity for an injunction restraining infringement of letters patent. While such a mere title holder may have a claim for money damages against an infringer, that claim may only be prosecuted in an action at law.

Since Respondent has no right to an injunction, the Bills should be dismissed, for, as this Court held in

*In the Doherty v. Vickers case, the plaintiff was more than a title-holder, as he had a license to use.

Peters Patent Corp. v. Bates & Klinke, 285 U. S. 392, l. c. 394:

> "The right to such an injunction underlies the equitable jurisdiction here invoked."

To entertain these suits in equity when respondent has no right to injunction violates Section 384 of Title 38, United States Code.

CONCLUSION

From the foregoing, we submit, it appears that the Circuit Court of Appeals for the Sixth Circuit has misinterpreted, misapplied and refused to follow the decisions of this Court; and that questions of policy and abuse of the Patent Laws are presented, which are important not only to these petitioners, but to the public, inventors, and industry at large.

Wherefore your petitioners pray that their petition be granted, that the Writs of Certiorari be issued, and the causes reviewed, and the decrees of the Court of Appeals reversed.

Respectfully submitted,

JOHN H. BRUNINGA,
JOHN H. SUTHERLAND,
Attorneys for Petitioners.

January 6, 1940.

APPENDIX.

BLANK PAGE

IN THE

Supreme Court of the United States

OCTOBER TERM, 1939.

No. 650.

THE SCHRIBER-SCHROTH COMPANY, *Petitioner*,

v.

THE CLEVELAND TRUST COMPANY, CHRYSLER CORPORATION,
Respondents.

No. 651.

THE ABERDEEN MOTOR SUPPLY COMPANY, *Petitioner*,

v.

THE CLEVELAND TRUST COMPANY, CHRYSLER CORPORATION,
Respondents.

No. 652.

THE F. E. ROWE SALES COMPANY, *Petitioner*,

v.

THE CLEVELAND TRUST COMPANY, CHRYSLER CORPORATION,
Respondents.

ORDERS OF THE COURT MODIFYING OPINION FORMING PART OF APPENDIX TO PETITION.

BLANK PAGE

SUPREME COURT OF THE UNITED STATES

ORDERS OF THE COURT, DECEMBER 12, 1938.

No. 3. THE SCHRIBER-SCHROTH COMPANY, *Petitioner*, v. THE CLEVELAND TRUST COMPANY, ET AL.;

No. 4. THE ABERDEEN MOTOR SUPPLY COMPANY, *Petitioner*, v. THE CLEVELAND TRUST COMPANY, ET AL.;

No. 5. THE F. E. ROWE SALES COMPANY, *Petitioner*, v. THE CLEVELAND TRUST COMPANY, ET AL.

Ordered that in each of these cases the following direction be added to the judgment:

> On the remand the Court of Appeals will be free to consider whether the amendments to the Gulick application rendered void the patent issued upon it, and to consider all questions affecting the validity and infringement of the claims in suit of the Gulick and Maynard patents, but without including web flexibility or laterally flexible webs as an element in the combinations patented by them.

Ordered that the second sentence on page 1 of the opinion of this Court in this cause be amended to read:

> Respondent, the Cleveland Trust Company, is the assignee in trust of some eighty patents relating to pistons of the type employed in internal combustion engines for automobiles, under a pooling agreement to which an automobile manufacturer and a number of manufacturers of pistons are parties.

And that the last sentence in the first full paragraph of page 4 of the opinion be amended to read:

> Reference to a combination including, with other elements, web connections, "whereby said piston skirt is rendered yieldable during operation in response to cylinder wall pressure" appears in Claim 18.

It is further ordered that respondent's motion to modify the judgments and the opinion be in all other respects denied, and that the petition for rehearing be denied.

BLANK PAGE

SUPREME COURT OF THE UNITED STATES.

Nos. 3, 4, 5.—October Term, 1938.

The Schriber-Schroth Company, Petitioner,
vs.
The Cleveland Trust Company, Chrysler Corporation.

The Aberdeen Motor Supply Company, Petitioner,
vs.
The Cleveland Trust Company, Chrysler Corporation.

The F. E. Rowe Sales Company, Petitioner,
vs.
The Cleveland Trust Company, Chrysler Corporation.

On Writs of Certiorari to the United States Circuit Court of Appeals for the Sixth Circuit.

[November 7, 1938.]

Mr. Justice Stone delivered the opinion of the Court.

The principal question for decision is whether the court below rightly sustained the validity of two patents by including in the combination constituting the alleged invention of each an element which was not in terms described in one, and the description of which in the other was added only by amendment to the application after it was filed.

Respondent is the assignee in trust, under a pooling agreement among a number of automobile manufacturers, of some eighty patents relating to pistons employed in internal combustion engines. It brought the present suits in the District Court for Northern Ohio to enjoin infringement of five of the assigned patents. The case was tried before a special master who, upon the basis of elaborate findings, held that the Gulick patent, No. 1,815,733, applied for November 30, 1917 and allowed July 31, 1931, was invalid for want

of invention and because of the addition to the application by amendment in 1922 of a new element of the alleged invention. In reaching this conclusion he relied on this Court's decisions in *Powers-Kennedy Co.* v. *Concrete Co.*, 282 U. S. 175 and *Permutit* v. *Graver Corporation*, 284 U. S. 52, as inconsistent with the result of interference proceedings in which Gulick's amendments were sustained, *Long* v. *Gulick*, 17 F. (2d) 686, *Hartog* v. *Long*, 47 F. (2d) 369. The master also held that the Maynard patent No. 1,655,968, applied for January 3, 1921 and allowed January 10, 1928, was invalid for want of invention and for failure to describe and claim the alleged invention. He held invalid upon various grounds the other patents, which are not presently involved.

The District Court adopted the findings and conclusions of the master and gave its decree for petitioners. The Court of Appeals for the Sixth Circuit reversed, as to the Gulick and Maynard patents only, holding that they were valid and infringed. 92 F. (2d) 330.[1] As the court regarded the claims which it sustained as basic and thought that a full recovery could be had by respondent under them, it did not pass upon the validity of the other patents or decide other questions involved in the appeal.

Petition for certiorari raising the question, among others, whether the Court of Appeals had erred in holding patentable a combination including one element not described in the original application for the Gulick patent and later added to it by amendment, and not described at all in the Maynard patent, was at first denied, there being no conflict of decision. 303 U. S. 639. We later granted certiorari, — U. S. —, on a petition for rehearing showing that, notwithstanding the doubtful validity of the patents, litigation elsewhere with a resulting conflict of decision was improbable because of the concentration of the automobile industry in the sixth circuit. Cf. *Paramount Publix Corp.* v. *American Tri-Ergon Corp.*, 294 U. S. 464; *Altoona Publix Theatres, Inc.* v. *American Tri-Ergon Corp.*, 294 U. S. 477.

It is important for the proper functioning of the piston in a gas engine that it should fit the explosion chamber closely so as to conserve power, prevent the passage of lubricating oil around the piston into the chamber, and insure the smooth and noiseless move-

[1] The decree sustained Gulick's claims numbered 1, 11, 12, 13, 15, 18, 30 and 33, and Maynard's claims numbered 1, 6 and 8.

ment of the piston within the cylinder. In designing gas engines for automobiles and other purposes requiring a high speed piston reciprocation with the accompanying development of high temperature in the explosion chamber, it is desirable to avoid thermal expansion of the close fitting piston, which will result in loss of power and possible injury to the mechanism through increased friction, which may cause the piston to seize or stick. The danger of undue expansion is increased when, as is advantageous in automobile engines, the piston is of aluminum, which has a higher coefficient of expansion than the iron or steel chamber within which the piston moves.

Both the Gulick and Maynard patents are for combinations in the structure of a piston for gas engines designed to prevent or restrict undue expansion of the piston when in operation. The Gulick patent exhibits a piston in which the ring-carrying head is separated by an air space at its periphery from the cylindrically shaped skirt or guide wall, whose surface engages the inner surface of the cylinder. The piston head and skirt are connected by two "webs" or walls extending longitudinally through the interior of the skirt. The webs are pierced at right angles for wrist pin bearings and support, at the bearings, piston pin bosses formed with integral flanges extending laterally from their respective bosses to form the webs, which in turn are integrally connected on either side with the interior wall of the lower part of the skirt and at their ends with the piston head. The skirt is longitudinally split on one side at a point in its circumference approximately midway between the pin bosses, with the edges of the skirt formed by the split separated so as to admit of the free movement of the edges toward each other.

The structure is thus designed to minimize the expansion resulting from high temperatures developed in the chamber and to avoid the effects of thermal expansion of the skirt. The webs, which afford at the wrist pin bearings the means for connecting the piston rod with the piston, serve to hold the head and skirt in proper relation to each other so that the air space between them retards flow of heat from the head to the skirt, undue expansion of the skirt, and the consequent increase of friction between piston and enveloping cylinder. Undue expansion of the piston is said by the patent's specifications to be avoided by the separation of the skirt by the longitudinal split in order to admit of unrestrained move-

ment of the edges of the skirt toward each other. Elsewhere they state that "when the longitudinal split is used, as shown, the web structure has sufficient lateral flexibility to permit the split to close more or less under the action of the expansion forces incident to the heating of the piston."

The elements of the combination as enumerated in Claim 39 are: "A piston, open at one end, for an engine cylinder comprising a skirt and head separated from the skirt wall around its entire periphery, said skirt being longitudinally split to render the skirt wall yieldable on every diameter in response to cylinder wall pressure, wrist pin bosses, and means rigidly connecting said bosses to the head and yieldingly connecting said bosses to the skirt whereby said skirt is yieldable in response to cylinder wall pressure." References to the means, the webs, connecting the head to the split skirt as being "yieldable" in response to lateral cylinder wall pressure appear in claims 18 and 33.

The combination of piston head separated from a slitted skirt by an air space, the two being connected by webs supporting wrist pin bearings with bosses which do not come directly in contact with the walls of the skirt, was plainly foreshadowed by the prior art as a practicable means of minimizing the flow of heat from head to skirt and of securing lateral flexibility in the skirt. The expired Spillman and Mooers patent No. 1,092,870, of April 14, 1914, pooled with the patents in suit, showed a piston with head separated by an air space from the skirt, the two being connected by a web separated from the skirt except at the point of integral connection with it at the lower end of the cylinder, and providing bearings for a wrist pin connection with bosses not in direct contact with the wall of the skirt.

Flexibility of the skirt attained by longitudinal slits was old, as shown by the Ebbs patent No. 700,309 of 1902, and Van Bever, No. 1,031,212 of 1912. The Franquist piston, patent No. 1,153,902 of 1915, another of the pooled patents, which showed piston head partially separated from skirt by air spaces, attained flexibility of the piston wall by longitudinal grooves in the skirt which interrupted its outer periphery though connected at the inner edges of the groove by a fold of the metal on the accordion principle. The Long piston, patent No. 1,872,772 of 1932, which the master and the district court found was in commercial use from 1917 on, and before the amendment of the Gulick application, presently to be dis-

cussed, showed longitudinal slits cut through the skirt, which was separated by air spaces from the piston head, the two being connected by parallel webs pierced for wrist pin bearings.

The court below found invention in the Gulick disclosure in a combination of elements, of which one was webs "laterally flexible", which were not specifically so described in the Gulick application until the amendment of 1922. Conceding that the deceleration of the flow of heat from head to skirt by an air gap might be an obvious expedient of the art, and that to slit the skirt vertically so as to compensate for thermal expansion might not be beyond the skill of the art, the court added: "But to combine insulation of head from skirt, retraction of the bosses from the skirt periphery, connection of such bosses to the skirt with webs laterally flexible and yet so carried from the head as to support the load upon the wrist pin with sufficient strength and rigidity and to utilize the mechanical force of the cylinder wall upon the skirt and the thermal expansion of the bosses so as to compensate evenly and fully for head expansion and to secure a balanced flexibility of the skirt with no bending concentration at any point therein, discloses we think a meritorious concept beyond the reach of those skilled in the art." 92 F. (2d), at 334.

We can find no support in the opinion for the contention of respondent that the Circuit Court of Appeals did not consider the flexible web an essential element in Gulick's invention. Its enumeration, among other named elements, of the connection of head and skirt by webs laterally flexible as embodying a meritorious concept must be taken to indicate that the court regarded the flexible webs as a part of the invention, the more so since it indicates that lateral flexibility of the webs is the only feature mentioned not within the prior art or within the expected skill of the art. It rejected, on the authority of *Long* v. *Gulick, supra*, and *Hartog* v. *Long, supra*, the contention made below and pressed here that Gulick's application as filed did not disclose "webs laterally flexible" and the resultant "balanced flexibility of the skirt," and that those features were added to specifications and claims after the use of the Long piston and after they had appeared in Hartog.

The Gulick application, which was filed November 30, 1917, contained no reference in terms to laterally flexible webs or to the function of the webs in securing flexibility of the skirt. The

specifications pointed to no inadequacy in the structure or function of webs of the prior art which would be remedied by the webs specified and to no function to be performed by them other than as a means of connecting and holding head and skirt so as to maintain the air gap between them and to support the wrist pin bearings and their bosses as both were shown in Spillman and Mooers. On the contrary, Gulick's application described the webs as "extremely rigid" and stated that an object of the invention was "to rigidly support the piston pin bosses of a piston from the piston walls." The only description of the web structure was as follows:

"It will be seen that in addition to providing a piston with a split skirt the above described construction also provides an extremely rigid connection between the piston pin bosses and the skirt of the piston, which construction may be used either with or without the split skirt and separated head. The arrangement of the supporting flanges 17 between the ends of the piston pin bosses and the connection of those flanges with the piston skirt provide a particularly strong support for the bosses."

The webs as shown by the drawings conform to the specifications of an "extremely rigid connection" between piston pin bosses and skirt and "a particularly strong support for the bosses." They form chords subtending the arc of the circle of the skirt, with flanges depending from the head to the bosses at right angles to the webs, and the skirt as shown is provided with interior corrugations and with an inturned flange at the bottom, all familiar devices for securing rigidity of structure. Neither drawings nor specifications give dimensions showing thickness or other proportions which might suggest a flexible structure.

In 1922, after the Long piston, whose webs concededly were laterally flexible, was in commercial use, and Hartog, to the knowledge of Gulick's assignee, had specified and claimed a yieldable web, Gulick copied the Hartog claim and amended his specifications so as to state that one of the objects of his invention was "to rigidly support the piston pin bosses of a piston from the piston wall against mechanical load thrust from the connecting rod without interfering with the yielding characteristics of the skirt in response to cylinder wall pressure." And he amended his description of the web structure to read:

"The arrangement of the supporting flanges 17 between the ends of the piston pin bosses and the connections of those flanges with both the piston guide portion and the head provide a particularly strong construction, and at the same time, when the longitudinal

split is used, as shown, the web structure has sufficient lateral flexibility to permit the split to close more or less under the action of the expansion forces incident to the heating of the piston."

Petitioners insist that the flexible web element of the Gulick combination, as found and sustained by the court below, is excluded from the Gulick patent by reason of his failure to describe that element in his application as filed and that he could not cure the omission and secure a patent embodying that feature by substituting by way of amendment "webs laterally flexible" for "extremely rigid webs" in the description of his invention. The statute, R. S. § 4888, provides that the application which the inventor must file as a prerequisite to a patent shall contain "a written description of [his invention] . . . and of the manner and process of making, constructing . . . and using it in such full, clear, concise, and exact terms as to enable any person skilled in the art . . . to . . . construct . . . and use the same; and in case of a machine, he shall explain the principle thereof, and the best mode in which he has contemplated applying that principle, so as to distinguish it from other inventions. . . ."

The object of the statute is to require the patentee to describe his invention so that others may construct and use it after the expiration of the patent and "to inform the public during the life of the patent of the limits of the monopoly asserted, so that it may be known which features may be safely used or manufactured without a license and which may not." *Permutit Co.* v. *Graver Corporation*, 284 U. S. 52, 60. It follows that the patent monopoly does not extend beyond the invention described and explained as the statute requires, *Permutit Co.* v. *Graver Corporation*, *supra*, at 57; that it cannot be enlarged by claims in the patent not supported by the description, *Snow* v. *Lake Shore Railway*, 121 U. S. 617; cf. *Smith* v. *Snow*, 294 U. S. 1; and that the application for a patent cannot be broadened by amendment so as to embrace an invention not described in the application as filed, at least when adverse rights of the public have intervened. *Railway Co.* v. *Sayles*, 97 U. S. 554, 563, 564; *Powers-Kennedy Co.* v. *Concrete Co.*, 282 U. S. 175, 185-186; cf. *Webster Electric Co.* v. *Splitdorf Electrical Co.*, 264 U. S. 463; *Permutit Co.* v. *Graver Corporation*, *supra*; *Crown Cork & Seal Co.* v. *Gutmann Co.*, 304 U. S. 159.

Respondent earnestly argues, as both courts held in the interference proceedings, *Long* v. *Gulick*, *supra*, and *Hartog* v. *Long*,

supra, that the changes in Gulick's application were not alterations in the description of his invention but were at most a permissible clarification of its description of the flexible web element which was present, or at least plainly suggested, in the specifications and drawings of the Gulick application. Flexibility, it is said, as is well known to those skilled in the art, is an inherent property of the metal out of which the webs are made, and in consequence reference to the webs in the application as filed was sufficient to import into it as a part of the description of the invention their known quality of flexibility, a description which was made more specific, but not altered, by the amendments. The argument suggests that it was but the skill of the art, and not invention, to substitute a flexible f[illegible] a rigid means of connecting head and skirt in a known combination of piston head separated from a slitted skirt by an air space and connected by webs. But in any case we think it falls short of establishing that the Gulick amendments were not new matter beyond the scope of the device described in the application as filed.

The properties of any given material are many and diverse. The antithetical qualities of rigidity and flexibility of a structure are not absolute but relative; it may be more rigid than some and more flexible than others; too rigid for some purposes and too flexible for others. The one quality may be increased and the other diminished by choice of materials from which the structure is made and by variation in its proportions. If invention depends on emphasis of one quality over the other, as the court below found was the case with the laterally flexible webs in the Gulick device, the statute requires that emphasis to be revealed to the members of the public, who are entitled to know what invention is claimed. That is not accomplished either by naming a member having inherent antithetical properties or by ascribing to it one property when the other is meant. Since rigidity is a relative term, the characterization of the structure as rigid must be taken as emphasizing rigidity rather than its opposite, flexibility, with special reference to the conditions to be encountered in the operation of the piston. Even if those skilled in the art would have known that a piston with webs which would yield enough laterally to accommodate the constriction of the split skirt under the pressure developed by thermal expansion would work most effectively if the webs were laterally flexible rather than rigid, that was not the inven-

tion which Gulick described by his references to an extremely rigid web.

Gulick also failed to explain the principle of his machine so as to distinguish it from the prior art. Webs having the inherent properties both of rigidity and flexibility were familiar elements in piston structure. The court below, after pointing out that the slots of the Franquist skirt rendered it capable of limited constriction, found a distinguishing feature of Gulick's piston to be a web relatively flexible laterally, so as to accomodate the constriction of skirt to thermal expansion, the combination operating to secure a "balanced flexibility" of the skirt. But that principle—facilitating skirt constriction rather than obstructing it—was first explained and its embodiment in the flexible-webbed device was first claimed by the amendments to the application.

As already indicated, the omission from the specifications was not supplied by the drawings, which failed to disclose by dimensions the proportions of the webs. Inherent flexibility of the web in cooperation with the slit skirt cannot be depended upon to produce the desired effect in rendering the skirt yieldable in response to cylinder wall pressure. As respondent's own expert testified, that depends upon design of the web, with correct proportioning of the different parts as to location and thickness to produce lateral flexibility. Inherent rigidity, made more effective by design of the webs, would correspondingly curtail the desired effect.

We recognize the weight to be attached to the determinations in the interference proceedings in which the Court of Appeals of the District of Columbia and the Court of Customs and Patent Appeals sustained the Gulick amendments. Cf. *Radio Corporation* v. *Radio Laboratories*, 293 U. S. 1, 7. But the decisions in those cases are not controlling here. So far as the courts relied on the inherent flexibility of the webs to supply the feature of lateral flexibility omitted from the Gulick description they ignored the principle recognized in *Permutit* v. *Graver Corporation*, *supra*, and *Powers-Kennedy* v. *Concrete Co.*, *supra*. So far as they relied on the drawings to supply the omission they disregarded the fact shown both by inspection and by the evidence presented here that the drawings do no more to point to Gulick's invention than does the fact of inherent flexibility. We conclude that respondent can take no benefit from the flexible web element added by amendment to the Gulick application.

In sustaining the claims of the Maynard patent the court below said that "Maynard . . . . embodies the Gulick combination of skirt insulation, skirt flexibility by means of vertical slotting cooperating with longitudinal slotting, and flexible webs in the region of the wrist pin bosses. He also follows Jardine's simplified design to permit economical manufacture and Jardine's boss relief", and after enumerating certain mechanical features of the Maynard construction differing from Gulick and Jardine, concluded: "It is clear that Maynard, while not departing from the teaching of Gulick in basic combination of elements, discloses a piston lighter and more economical of manufacture than Gulick and one more rugged and durable than Jardine." 92 F. (2d), at 337.

Invention over Gulick and Jardine was apparently found in the details of construction but, as we are without other indication of the character of the invention, we construe the court's opinion as including the laterally flexible webs as an essential element in the patented combination. As flexible webs are neither described in Maynard's specifications nor mentioned in his claims, they can be imported into them only by reference to the drawings or by inference from the inherent flexibility of the structure, which, for reasons already given in our consideration of the Gulick amendments, are insufficient to accomplish that result. We conclude that the court below erred in giving any effect to so much of the Gulick patent as by amendment describes or claims the flexible webs, and in treating any of the specifications or claims in Gulick and Maynard as referring to such webs. We assume that it sustained Claim 1 of the Gulick patent, which makes no mention of web flexibility, only by reading into it that element, which the court regarded as an essential part of the invention.

As the Court of Appeals did not pass upon other questions in the case, the causes will be reversed and remanded to it for further proceedings, in conformity with this opinion, with respect to such claims of the patents in suit as appellant below submitted to that court for adjudication.

Reversed.

Mr. Justice ROBERTS took no part in the consideration or decision of this case.

BLANK PAGE

BLANK PAGE

FILE COPY

Office - Supreme Court, U. S.
FILED
MAR 1 1940
CHARLES ELMORE CROPLEY
CLERK

IN THE

SUPREME COURT OF THE UNITED STATES.

OCTOBER TERM, 1939.

THE SCHRIBER-SCHROTH COMPANY, Petitioner,
vs.
THE CLEVELAND TRUST COMPANY, CHRYSLER CORPORATION, Respondents.
No. [redacted] 9

THE ABERDEEN MOTOR SUPPLY COMPANY, Petitioner,
vs.
THE CLEVELAND TRUST COMPANY, CHRYSLER CORPORATION, Respondents.
No. [redacted] 10

THE F. E. ROWE SALES COMPANY, Petitioner,
vs.
THE CLEVELAND TRUST COMPANY, CHRYSLER CORPORATION, Respondents.
No. [redacted] 11

PETITIONERS' REPLY TO BRIEF FOR PLAINTIFFS-RESPONDENTS ON PETITION FOR WRITS OF CERTIORARI.

JOHN H. BRUNINGA,
JOHN H. SUTHERLAND,
1004 Market Street,
St. Louis, Missouri,
Counsel for Petitioners.

St. Louis Law Printing Co., 415 North Eighth Street. CHestnut 4477.

BLANK PAGE

INDEX.

	Page
Preliminary	1
The questions involved	4
Question I	4
Question II	10
Question III. With reference to injunctive relief	15
The patent pool	16
Conclusion	19

Cases Cited.

Carbice Corp. v. American Patents Corp., 283 U. S. 27 and 420	3
Dayton Rubber Mfg. Co. et al. v. Stagnaro, 307 U. S. 627	2
De Forest v. General Electric, 283 U. S. 664, 686	12
McCarty v. Lehigh Valley R. R. Co., 160 U. S. 110, 116	7
National Hollow Brake-Beam Co. v. Interchangeable Brake-Beam Co., 106 F. 693, 701	8
Permutit v. Graver Corp., 284 U. S. 52	6
Stearns v. Russell, 85 F. 218, 224, C. C. A. 6	7
Wm. B. Schaife & Sons v. Falls City Woolen Mills Co., 209 F. 210	7

Statutes Cited.

R. S. 4886	2
R. S. 4888	2, 7, 15

BLANK PAGE

IN THE

SUPREME COURT OF THE UNITED STATES.

OCTOBER TERM, 1939.

THE SCHRIBER-SCHROTH COMPANY, Petitioner, vs. THE CLEVELAND TRUST COMPANY, CHRYSLER CORPORATION, Respondents.	No. 650.
THE ABERDEEN MOTOR SUPPLY COMPANY, Petitioner, vs. THE CLEVELAND TRUST COMPANY, CHRYSLER CORPORATION, Respondents.	No. 651.
THE F. E. ROWE SALES COMPANY, Petitioner, vs. THE CLEVELAND TRUST COMPANY, CHRYSLER CORPORATION, Respondents.	No. 652.

PETITIONERS' REPLY TO BRIEF FOR PLAINTIFFS-RESPONDENTS ON PETITION FOR WRITS OF CERTIORARI.

To the Honorable the Chief Justice of the United States and the Associate Justices of the Supreme Court of the United States:

This is not an ordinary patent case as, were the cases cited in the brief of Plaintiffs-Respondents, page 1. The questions involve the construction of the Patent Statutes,

R. S. 4888 and R. S. 4886, and of the injunction statute of the United States Code. The petition presents not only the question of doubtful validity, but a question of sufficiency of claiming as distinguished from a sufficiency of disclosures and claiming as in this Court's previous decision in this case.

That this Court should not have to review causes when all the lower Courts had concurred* like those cited, page 2, Plaintiff's** Brief, merely because there is concentration of automobile industry in the Sixth Circuit is recognized. But where, as in the instant cases, there has been such disagreement, as well as indecision, review by this Court is deserving.

Defendants' Petition for Writ of Certiorari presents only the matter of the Jardine patent. This patent was held invalid by the Master, whose report was confirmed by the District Court; in its first consideration, the Court of Appeals dismissed as to this patent without prejudice; and at the instance of Plaintiff a decree was entered in the District Court dismissing as to it without prejudice. Thereafter, this Court remanded the causes to the Court of Appeals. In Plaintiff's fifty-one page Brief upon the remand, but two and one-half pages were devoted to the Jardine patent; but in its Reply Brief the Jardine patent was made the spearhead of its attack. At the oral argument in the Court below, not one word was said by Plaintiff's Counsel anent the Jardine patent in the opening argument, and, according to custom, Defendants' Counsel limited their statements to answering the arguments of Plaintiff's Counsel; but thereafter Plaintiff's Counsel, in his closing argument, made the Jardine patent again the

*In one of the cited cases, Dayton Rubber Mfg. Co. et al. v. Stagnaro, 307 U. S. 627, validity was conceded (see 101 F. [2] 808, l. c. 809).

**We herein refer to Respondent, the Cleveland Trust Company, as Plaintiff; and to the Petitioners in these cases as Defendants.

spearhead of his attack, and was heard by the Court, notwithstanding the objection of Defendants' Counsel.

Carbice Corp. v. American Patents Corp., 283 U. S. 27 and 420, involved a situation comparable to that presented here. This Court granted Certiorari, even though there was no conflict of decisions between Circuit Courts of Appeals, apparently because a new question of patent law was involved and this Court's first decision was limited to such a question, 283 U. S. 27. Thereafter in view of the circumstances stated in this Court's decision, 283 U. S. 420, this Court entertained a petition for further consideration on the question of the validity of the patent over the prior art and held the patent invalid.

In this case the suit was on five patents, namely, the Gulick, Maynard, Jardine, Mooers and Schmiedeknecht patents, all of which were found invalid by the Master and the District Court. The Court of Appeals only passed on the validity of the Gulick and Maynard patents and dismissed as to the others. This Court then reversed the Circuit Court of Appeals as to the Gulick and Maynard patents. The Court of Appeals, after holding the Gulick, Maynard, Schmiedeknecht and Mooers patents invalid over the prior art, practically substituted the Jardine patent for the Maynard patent, by assigning to it the same distinction over the prior art as had been assigned to the Gulick patent, and held it infringed by the same piston, Exhibit 1, which had previously been held to infringe the Gulick patent. In this case there is more reason for this Court to pass upon the validity of the Jardine patent than there was in the Carbice Case, because here the Court of Appeals has misinterpreted and unduly limited the decision of this Court in this same case and certainly the decision of this Court in Permutit v. Graver, 284 U. S. 52, which was extended and applied by this Court in this case.

With reference to the possibility of litigation in other Circuits, it is observed that Counsel are now "informed and believe," that The Cleveland Trust Company is registered in states outside the Sixth Circuit. While Respondent may be registered in foreign states at this time, being a banking corporation and therefore having no occasion, *bona fide*, to do business in foreign states, it is within Respondent's power to withdraw such foreign registration if this Court should not grant Certiorari. Thereafter the public would be in the same position as if Respondent had never registered in a foreign state.

THE QUESTIONS INVOLVED.

The questions involved here are not those listed under "bad law" in Plaintiffs-Respondents' Brief, pages 7-8.

Question I.

Defendants-Petitioners' question I is not simply whether a claim should be read in the light of the specifications, or whether a characteristic of an element can be read into it; the question is much more narrow, namely, whether

> a feature, found by the Court of Appeals to be an essential element of the patent, in order to hold it valid over the prior art, can be read into the claim by reference to the specification, where that feature was once included in the claims presented by the applicant but excluded from claims as finally issued, after adverse decisions in interferences on claims including such a feature.

That the Court of Appeals found the thing which distinguished the Jardine patent from the prior art to reside in "flexing webs," is clear not only from that court's second decision, but also from its first decision; and it will be noted that Plaintiffs-Respondents' position in that regard is the same as was taken before this Court on Peti-

tioners-Defendants' previous petition and before the Court of Appeals after this Court had so construed the Court of Appeals' first decision.

The first decision of the Court of Appeals found the feature which distinguished the Gulick patent from the prior art to reside in "webs laterally flexible" (p. 6) and found Jardine's contribution to reside in the "flexible web" (p. 11). This Court so regarded the Court of Appeals' view as to the Gulick patent (pp. 5, 10), but held there was no such disclosure in the original Gulick application. The Court of Appeals in its second decision, after affirming that "Gulick's basic concept * * * as we then considered it was of balanced flexibility derived from interplay of yielding skirt periphery and **flexing** supporting webs," and that the patent could not now be so considered, said (pp. 4, 5):

> "This is not the combination we held to be valid. It is not the combination to which those most captious and skilled in the industry gave tribute, to the end that all our doubt as to validity was resolved. We are constrained to hold all of the claims in suit of Gulick invalid as marking no inventive step over prior art."

Although the Court of Appeals in its first decision had said (p. 11) that "Jardine was without substantial commercial recognition and none of the accused devices are slipper pistons," proceeded in its second decision (p. 5) upon the basis that

> "Jardine with great clarity and in precise detail explains the principle of operation of his machine and the **flexibility** of its webs. The knowledge that was not Gulick's or was by him concealed, is clear to Jardine and by him proclaimed."

The Court of Appeals, after considering the Jardine description, including "**bending** of the webs," and then considering the claims, distinctly said (p. 6):

> "While the specimen claims of Jardine, 1, 8, and 11, though reciting the web as an element do not incorporate therein the property of **flexibility**, yet in the light of the description they must be so interpreted."

The Court of Appeals then found those claims valid, and stated (p. 9):

> "Our conclusion in this respect is based upon the concept of a combination with balanced skirt flexibility due to co-operation of longitudinal and vertical slotting with **flexing webs** supporting retracted bosses and connected to a skirt thereby made responsive to physical compression and thermal expansion so as to permit of minute clearances between piston and cylinder, a concept perceived in Gulick as amended and minus amendment no longer perceived."

The Court of Appeals in coming to its conclusion of the validity of the Jardine claims by reading into them "flexing webs" did not consider the question here presented, namely, that not only do the claims fail to mention that feature, but that that feature, once included in claims presented by Jardine, was excluded from claims as finally issued after adverse decision in interferences on claims including such feature, although that question was strenuously argued by Petitioners-Defendants before that court. Accordingly, in reading that feature into the claims the Court of Appeals not only misinterpreted, but unduly limited this Court's decision in this case and in other cases cited in the Petition of Defendants.

Plaintiffs-Respondents in their brief (p. 30) seek to distinguish from **Permutit v. Graver Corp.**, 284 U. S. 52, and more particularly the passage quoted in Petitioners-Defend-

ants' brief (p. 16), by the fact that in the patent involved in Permutit v. Graver there was neither description nor claim; however, the passage quoted is based upon the **claim requirement** of R. S. 4888, and that such was the view of this Court is apparent from this Court's statement, "**or** a failure to claim it" (284 U. S. 60), and this Court refers in a footnote to **McCarty v. Lehigh Valley R. R. Co.**, 160 U. S. 110, 116, cited in Defendants-Petitioners' brief (p. 15).

Again, in this case (dec. p. 10) this Court stresses that both the specification and claim requirements of R. S. 4888 must be complied with when this Court said:

> "We concluded that the court below erred in giving any effect to so much of the Gulick patent as by amendment describes **or claims** the flexible webs, and in treating any of the specifications **or claims** in Gulick and Maynard as referring to such webs."

In this case the Court of Appeals has not only departed from the decisions of this Court, but from a previous decision of the Court of Appeals for the Sixth Circuit, namely, **Wm. B. Schaife & Sons v. Falls City Woolen Mills Co.**, 209 F. 210, where Judge Denison, after stating the general rule that ordinarily a claim should be construed in connection with the specification, states the exception as follows (l. c. 213):

> "But where, from the specification or the **history of the application** or the language of the claim it is clear that the patentee intended to claim and the Patent Office intended to grant the broader monopoly which turns out to be invalid, the courts will not, for the arbitrary purpose of saving the claim, read into it a limitation which it does not have."*

*Judge Denison cites McCarty v. Lehigh Valley R. R., 160 U. S. 110, 116, and Stearns v. Russell, 85 F. 218, 224, C. C. A. 6, in which the decision was by the later Chief Justice Taft, with whom sat the later Justice Lurton.

What is referred to in Plaintiffs-Respondents' brief (p. 7) as the "contract rule" does not permit what the Court of Appeals did in this case, because, in accordance with the contract rule, as stated by the late Judge Sanborn in **National Hollow Brake-Beam Co. v. Interchangeable Brake-Beam Co.**, 106 F. 693, 701:

> "Prior negotiations are merged in the contract, and, while they may be considered to interpret its purpose, they must not be permitted to contradict or modify its express meaning."

In this case the "prior negotiations," i. e., "the history of the application" in the Patent Office, and "the language of the claim," makes it "clear that the patentee intended to claim and the Patent Office intended to grant the broader monopoly which turns out to be invalid."

The extended discussion, beginning page 11 of Plaintiffs-Respondents' brief with reference to the interferences in which Long and Jardine were involved, is a specious quibble. For example, at page 13 counsel say, in effect, that there was no decision between Long and Jardine on the issue of flexible webs, whereas the record shows (R. 2092) that that issue was involved in synonymous language, "resilient joining means," in Interference 49,581 (R. 2090-3). While this was a three-party interference, and the interference papers in the record merely show that the award of priority was adverse to Jardine, reference to claim 5 of the Long patent No. 1,872,772 (R. 1735) shows affirmatively that Long prevailed. In our presentation of the flexible web matter we have been cognizant of the fact that in the record many synonymous expressions were used, but whether the interferences were contested on one form of phraseology or another makes no difference in the ultimate outcome. **Jardine never at any time upon any issue prevailed over Long.** But whether the interferences were with Gulick, Long or Hartog, or any or all of them, on

claims involving flexing webs, the fact is that such claims were canceled by Jardine after adverse decisions in the interferences.

In the footnote in Defendants' Petition (p. 5) we have listed the interferences. The claims of the Jardine application which were involved in these interferences are found in Vol. IV of the Record (pages 2034, 2060, and 2066-2068). They relate to the interferences as follows:

Interference	Jardine Claims
49570 (R. 2071-3)	15. **16E** (R. 2067)
49572 (R. 2076-8)	19. **20E** (R. 2068)
49578 (R. 2086-8)	18. **19E** (R. 2067)
49579 (R. 2088-90)	17. **18E** (R. 2067)
49581 (R. 2090-3)	20. **21E** (R. 2068)
49583 (R. 2094-6)	21. **22E** (R. 2068)
49590 (R. 2098-2100)	1. (R. 2034)
	11. (R. 2060)

Each and every one of the claims in the Interferences, except 49590, involved flexible webs by various names. The claims in Int. 49590 were structure claims which Jardine lost to Long, and they are claims 6 and 7 of the Long patent No. 1,872,772 (R. 1735). Likewise, claim 13. **14E** (R. 2066) involved in Int. 49576 (R. 2081-3) was lost by Jardine, and this claim not only specifies "the skirt portion being split longitudinally of the piston to permit free expansion and contraction," but, furthermore, "the skirt portion being cut away adjacent the outer ends of the piston bosses," which latter is put forward as a characteristic of the Jardine piston and of Exhibit 1 held to infringe the Jardine patent.

None of the claims of the Jardine patent (absent flexing webs) are valid over the prior art, even if Long is excluded. The Court of Appeals in the second decision (pp. 4-5) decided that the Gulick and Maynard patents were not valid,

absent flexing webs, and then construed the Jardine patent as covering what it had previously conceived was covered by Gulick (pp. 5, 9). In its first decision (p. 11) the Court of Appeals considered that "whatever Jardine contributed to the art, if anything, is said to be incorporated in Maynard." Surely, then, if the Gulick and Maynard patents are invalid as "marking no inventive step over the prior art," then Jardine, which is between those two, must clearly be invalid, absent flexing webs.* The Court of Appeals clearly came to that conclusion, and, therefore, found it necessary to read into the Jardine patent the feature of flexing webs; that was not permissible under the circumstances of this case.

The Court of Appeals obviously felt that flexibility in the webs was an essential feature of the combination. Whether it occupied the station of a mere characteristic, or the station of an element, is of secondary importance; the prime consideration being that feature was one which Jardine had contested with other parties in the Patent Office and lost at every turn; and the point which we present to this Court is that, be it characteristic or element, can an invalid patent claim be made valid by interpreting into it a feature which had been adjudicated to be the invention of someone other than the patentee, and which the patentee forthwith surrendered in the Patent Office?

Question II.

Defendants-petitioners' question II is not simply whether a different rule of interpretation for the prior art

*Reference is had to Appendix D in brief of Defendants-Respondents in Nos. 653, 654 and 655, which contains brief statements of what this Court and the Court of Appeals have said about the Spillman & Mooers and Franquist patents in connection with the Gulick patent, and about the Schmiedeknecht patent in connection with the Maynard patent, together with illustrations of those patents. While the Spillman & Mooers patent does not disclose a relief, the Franquist patent clearly disclosed one, and the Schmiedeknecht patent disclosed the very relief and webs used in the Maynard patent and in Exhibit 1, said to infringe the Jardine patent.

and for a patent in suit is to be followed, or whether a prior use should be proved by evidence which is clear and convincing and even beyond reasonable doubt, or even whether the sufficiency of disclosures of prior patents, publications, and prior uses should be the same. The question is much more narrow, namely, whether

> a prior use should be disregarded even though proved as to time and structure, unless an element thereof was "known to have the quality" assigned to it by the patent in suit, or whether that was "then understood,"

which are the very words used by the Court of Appeals in its second decision (p. 8).

That is the ground on which the Court of Appeals decided the validity of the Jardine patent over the Long pistons. The existence of these Long pistons prior to Jardine's filing date was not disputed by the Court of Appeals; indeed, it could not be in view of their identification, not only by defendant's witnesses, but by witnesses called by plaintiff, as shown in our Petition. Of course, during the trial prime emphasis was placed on the Gulick patent with its filing date of November 20, 1917, and the purpose of the witnesses called by Plaintiff was primarily to show that Long did not have a successful piston before that date. It was, therefore, not important to Plaintiff at that time whether there was proof of these Long pistons between November, 1917, and March, 1920, when Jardine filed.

The Court of Appeals evidently found the Long pistons proved as to date and as to structure prior to Jardine, and therefore based its conclusion upon a ground contrary to this Court's decisions. But Plaintiffs-Respondents stated in their brief (p. 24) that the Court of Appeals found it

unnecessary to examine the record on the question of whether the dates of these pistons and their structure had been established. The answer to that is that the Court of Appeals had the record before it, and the fact is that the only ground upon which the decision is based is that web flexibility was "not then understood" and that the Long webs "were (not) known to have that quality." Such requirement of a prior use, clearly established, is contrary to the decisions of this Court.

Plaintiffs-Respondents' counsel have confused the Long patents with the Long pistons in use prior to the filing of the Jardine application. Long, like De Forest,* may have been ignorant of the fact that his pistons had flexible webs; but Petitioners-Defendants are not relying on any Long patent or on what Long knew, but are relying on the pistons (Exhibits E, F, G and R), proved to have been in existence prior to Jardine's filing date, whether made by Long, Weems, or Franklin Motor Company. These pistons are before the Court; their dates have been proved not only by defendants' witnesses, but by witnesses called for and vouched for by plaintiff; yes, even Jeffries admitted he saw them in 1920. That is why the Court of Appeals did not question their dates.

The treatment of Jeffries' fatal admission by Plaintiffs-Respondents' counsel borders on the finesse. We want to repeat here what Jeffries testified (R. 1009-10):

> "Q. What do you say; do you think the webs **weren't flexible enough?** You have the piston before you, so you ought to be able to tell something about it.
> A. No, there is flexibility in the webs."

The question was not whether these webs were "flexible," but whether they were "flexible enough." The double

*De Forest v. General Electric, 283 U. S. 664, 686, cited in Petitioner's Brief, p. 18.

negative, "weren't" and "no," makes the answer "yes," that they were flexible enough, which obviously meant flexible enough when the piston was used in the cylinder of an automobile. The Court of Appeals obviously so understood it, and there is no real answer by Respondent to that except the possibility that there might be rubbing at the ends of the web. That is, however, characteristic of all these web pistons, and that is why we find the "Keystone relief" on Exhibit 1.

The plaudits which Plaintiff accords Jardine at page 9 et seq. of its Brief, are merely the echo of the puffing which Plaintiff did for Gulick when the case was here before.*

Applause of the Jardine patent as solving the problem, that it enabled .002 inch clearance and that it has gone into use by the millions, is absurd in the light of the finding by the Court of Appeals in its first decision (p. 11) "Jardine was without substantial commercial recognition and none of the accused devices are slipper pistons" and the admission of Plaintiffs-Respondents' witness, Jeffries, that the Jardine patent was subject to oil pumping (R. 145).

Reverting to the matter of rubbing at the webs, we have this interesting situation: It was attempted to place upon the market a piston like the Maynard piston, but without the Keystone relief, and Exhibit 21 (R. 1337) was proffered by plaintiff as a structure showing Jardine as well as Maynard. Jeffries admitted on cross-examination (R. 1045) that his previous statement (R. 178) of extensive use was based upon hearsay, for he admitted that he never installed or even saw such a piston, but saw only drawings; he did not even know whether any such piston ran for one hundred miles (R. 1046). Further, on cross-examination Jeffries produced unfinished castings (Exhibits

*And, indeed, of the same character as Plaintiff's acclaim for the Fronquist patent, before it expired.

3-M and 3-N), which admittedly did not have that Keystone relief (R. 135). On redirect examination (R. 189) Jeffries then produced drawings (Exhibits 21 and 22, R. 1337-40). Of these, only Exhibit 22 shows the Keystone relief, but it also shows the notation "their wire" (evidently Oakland's), that the Keystone relief was "added" February 10, 1925, namely, five years after the filing of the Jardine application.

As to clearances, there is not a word of evidence in the record that the Jardine piston ever operated in any engine at a clearance of .002 inch. No Jardine piston ever went into commercial use, and neither a Jardine piston nor a piston like Exhibit 1 was ever used in a Franklin air-cooled engine, as was the Long piston. And the Long piston was replaced not by a Jardine piston or a piston like Exhibit 1, but by a steel strut piston (Exhibit AA), which is something entirely different.

Plaintiff raises the inference, on page 14 of its brief, that Defendants should have called Long as a witness. Obviously, if Plaintiff had thought the testimony of Mr. Long would have favorably affected the record from its viewpoint, he would have been called to testify as Plaintiffs' witness, as the Record shows (R. 290) that Long and Plaintiffs were in concert.

The only uncertainty in the Long proofs before the Patent Office Tribunals, was an uncertainty as to whether Long had made the piston in question before Gulick filed in 1917. This is what the Examiner was discussing at Record 1535 and would have been plain if Counsel had completed the third sentence in the quotation at Brief, page 14. Never, at any time, was there any uncertainty with reference to the existence of Long's piston in 1918.

Finally, at page 29 of their Brief, Counsel says that none of Jardine's claims "depends for its patentability upon the fact that its web may yield or bend a trifle." If this

is so, the Court of Appeals was clearly misled, as indicated by the special pains it took to find that Long failed to invalidate Jardine, because Long did not understand that his webs were flexible. The Court of Appeals did not deny that Long was prior to Jardine as to every feature other than flexibility, and obviously, if it had not thought that flexibility had something to do with it, the Jardine claims would have been held invalid over Long.

We ask this Court to make no new rule of law as to standards of disclosure. That there is a difference in standards of disclosure is established by statute, and has been followed by the decisions of this Court, as cited in our petition.

For example, it cannot be denied that if, prior to March, 1920, some one familiar with the Ricardo piston (described in "The Automobile Engineer," October, 1918, R. 1647, Figure 2) had caused to be printed a sentence such as

"Slit the skirt of the Ricardo piston,"

that would have constituted a full and complete anticipation of the Jardine patent. The piston shown in the Jardine patent was described in the publication above mentioned (R. 1647) in all of its intricate detail, save for slitting a skirt; which feature, as this Court found in its previous decision, Page 4, was well known.

The sentence above suggested, while completely adequate as an anticipation under R. S. 4886, would be a far cry from providing the written description of the invention, and of the manner and process of making, constructing, compounding, and using it, and explaining the principle thereof, and the best mode of applying the principle as required by R. S. 4888.

Question III. With Reference to Injunctive Relief.

Whether the Aluminum Company of America is an exclusive or a nonexclusive licensee has no relation to the

point presented under III of the Petition. The proposition is that one cannot have an injunction to restrain a trespass upon a right which he does not own.

Plaintiff confuses the proposition which we presented to the Master, and the proposition which is presented here. We urged the Master to hold, as to the Jardine patent, that Plaintiff The Cleveland Trust Company did not have complete title (R. 1112); and we also urged the Master to hold that the Aluminum Company of America was an exclusive licensee, and as such an indispensable party to these suits, but the Master ruled that the Trust Company held the entire right, title and interest, and that the Aluminum Company of America was a nonexclusive licensee, hence not a necessary party to the suit (R. 1105, 1106).

The proposition presented here does not challenge the correctness of the Master's finding in any way. Notwithstanding that the Trust Company may own the entire right, title and interest in the Jardine patent, so that it may maintain suit thereon, and notwithstanding that the Aluminum Company of America is a nonexclusive licensee, Plaintiff is not entitled to any injunction under the Jardine patent, because it does not now have, and never has had, a right to do under the Jardine patent what Defendants are charged with doing. The only thing which Plaintiff retained unto itself was the right to make, use and sell, and to license others to make, use and sell, pistons made entirely of cast iron and steel. The rights which Defendants have been held to have trespassed upon involve aluminum pistons, and hence Plaintiff has suffered no trespass which entitles it to an injunction.

The Patent Pool.

The brief of Plaintiffs-Respondents states (p. 3) "hard cases should not make bad law," that (p. 7) "bad law

would result from the proposals" of Petitioners-Defendants, and that (p. 38) "it is unwise to make the bad law which Defendants ask." Petitioners-Respondents do not ask this Court to make "bad law," but rather the reverse, and to settle the law if it has not been settled.

Defendants-Petitioners did not "parade" the Aluminum Company of America and the patent pool, but the Petition mentions the agreements involving the Aluminum Company of America only as a basis of presentation for Question III. There was, therefore, no occasion for the nearly four pages of alleged reply, pages 3 to 7, which is mainly taken up with the virtues of the patent pool. However, since the matter was brought up by Plaintiffs-Respondents we deem it proper to reply and point out the dangers and abuses of a patent pool as shown by the proceedings in this case, which show the following:

1. Formation of the patent pool under a Trust Agreement, R. 1385, including the Spillman and Mooers, Franquist, Schmiedeknecht, Moores and later Gulick, Maynard and Jardine patents.

2. Amendment of the Gulick patent application, nearly five years after it was filed and over five years after the Long piston had appeared on the market.

3. Reliance upon the Spillman and Mooers and Franquist patents as pioneers, R. 1120-1123, 2299; issue of licenses thereunder, R. 1381, 1408, 1414; collection of royalties thereunder, R. 102, 2299; suits brought thereunder, R. 101, 2299; judgments recovered thereunder, R. 1341; even as to pistons exemplified by Exhibit 1 held by the Court of Appeals as infringing the Jardine patent.

4. After the Spillman and Mooers and Franquist patents had expired they were renounced by Plaintiffs-Respondents and denounced, R. 99-100, 107, 109, 177, 247, by Respond-

ents' expert as inflexible and unsuited for aluminum construction.

5. Reliance upon the Gulick patent as the prime solution of the problem with Jardine relegated to the background, causing the Court of Appeals to say in its first decision "Jardine was without commercial recognition."

6. Primary reliance upon Jardine after this Court's decision holding the Gulick and Maynard patents invalid.

A patent pool may have its compensation—for members of the pool—but it is not a healthy thing in our patent system, which has for its object "to promote the progress and the science of the useful arts by securing to * * * inventors the exclusive right to their * * * discoveries." Such a patent pool is certainly susceptible of manipulation, as illustrated by this case, so that successive patents may be put forward as those preceding them expire, and industry is compelled to defend a succession of assaults for the same thing.

The factors enumerated on pages 4, 5, and 6 of Plaintiff's Brief with reference to pooling, emphasize why it is important for this Court to zealously protect defendants from the ravages of patentees *en pack*. Against such combinations outsiders are compelled to seek cover under this Court's cloak of justice. The complexities of a case such as this, involving five patents and seven accused devices, are enough to overwhelm the average Court; whereas the patents, if treated separately, would have been relatively simple to "see through."

Defendant's Petition for Writs of Certiorari for the first time presents the Jardine patent in such manner that it may be judicially considered, as patents normally are and should be, on its own merits, *sans* the protecting and concealing influence of group force. We do not ask the Court

to take these cases merely because of concentration of the automobile industry in the Sixth Circuit, but because, compounded with that, is the question of very doubtful validity of the Jardine patent, new or unsettled questions of patent law, the unusual history of the litigation, and its public importance.

CONCLUSION.

It is therefore respectfully submitted that the Petition in these cases, which brings up only the matter of the Jardine patent, should be granted.

Respectfully submitted,

JOHN H. BRUNINGA,
JOHN H. SUTHERLAND,
1004 Market Street,
St. Louis, Missouri,
Counsel for Petitioners.

February 28, 1940.

BLANK PAGE

FILE COPY

Office - Supreme Court, U. S.
FILED
SEP 3 1940
CHARLES ELMORE CROPLEY
CLERK

IN THE

SUPREME COURT OF THE UNITED STATES.

OCTOBER TERM, 1940.

No. 9.

THE SCHRIBER-SCHROTH COMPANY,

Petitioner,

vs.

THE CLEVELAND TRUST COMPANY,
CHRYSLER CORPORATION,

Respondents.

No. 10.

THE ABERDEEN MOTOR SUPPLY CO.,

Petitioner,

vs.

THE CLEVELAND TRUST COMPANY,
CHRYSLER CORPORATION,

Respondents.

No. 11.

THE F. E. ROWE SALES CO.,

Petitioner,

vs.

THE CLEVELAND TRUST COMPANY,
CHRYSLER CORPORATION,

Respondents.

PETITIONERS' BRIEF.

JOHN H. BRUNINGA,
JOHN H. SUTHERLAND,
Attorneys for Petitioners.

August 31, 1940.

St. Louis Law Printing Co., 415 North Eighth Street. CEntral 4477.

BLANK PAGE

INDEX.

	Page
The opinions of the Court below and of this Court	1
Jurisdiction	3
Statement of the case	3
The parties	3
The second decision of the Court of Appeals	4
The Jardine patent and its history	6
History of piston development before Jardine	8
The Long and Gulick patents	13
The Master's findings reference Jardine	16
The Hartog and Pomeroy patents	16
The Long commercial pistons	17
Further proof of Long pistons	19
The accused piston, Exhibit 1	25
Specification of errors assigned and to be urged	27
Summary of argument	28
Argument	29
Point I. The Circuit Court of Appeals treated "flexing webs" as essential elements of the Jardine patent, and held the patent valid notwithstanding that such elements are not mentioned in any of the claims, but were in fact surrendered during the prosecution of the application after adverse decisions in interferences, and intentionally excluded from the patent as essential elements, and the Court of Appeals refused to follow the decisions of this Court	29
The omission of flexing webs from Jardine's claims was deliberate and intentional	34
The Court of Appeals found the distinguishing feature to reside in flexing webs	35

The Court of Appeals read particular flexing webs into Jardine's claims, contrary to this Court's decisions 38

The Court of Appeals found infringement by a piston which has no flexing cantilever webs.. 41

Point II. The Court of Appeals' decision that the Long pistons were unavailing as a defense under the Patent Statute, R. S. 4886, although prior to the earliest proved date of the alleged invention of the Jardine patent in suit, unless the scientific explanation of the mode of operation of the Long pistons was understood, is contrary to the decision of this Court in De Forest Radio Co. v. General Electric Co., 283 U. S. 664..... 44

A proved prior use is inherently a source of knowledge 46

The Long pistons proved as prior to Jardine admittedly had flexing webs..... 48

The Court of Appeals' requirement of knowledge or understanding of quality is contrary to this Court's decisions..... 50

The Jardine piston is a step backwards in the art 52

The evidence establishes the Long pistons prior to Jardine 53

The Long pistons were commercially successful prior to Jardine 55

The Jardine claims are invalid over the prior art 55

Point III. The Court below erroneously ordered the issuance of an injunction restraining petitioners from the sale of pistons like Exhibit 1, which is all aluminum 57

Conclusion 59

Cases Cited.

Adamson v. Gilliland, 242 U. S., l. c. 353 43
Alexander Milburn Co. v. Davis-Bournonville, 270 U. S. 390 13
Altoona Theatres v. Tri-Ergon, 294 U. S. 477, 489..33, 40, 59
Aluminum Company of America v. Sterling Company, 66 F. (2d) 958, C. C. A. 8 ..... 25, 47
Bates v. Coe, 98 U. S., l. c. 49 43
De Forest Radio Co. v. General Electric Co., 283 U. S. 664, 51 S. Ct. 563 ..... 28, 44, 45, 46, 50
Doherty Research Company v. Vickers Petroleum Company, 80 Fed. (2d) 809 58
Eibel Process Case, 261 U. S. 45, 60 ..... 53, 55
General Electric Co. v. Wabash Appliance Co., 304 U. S. 364, 369 40
Greenwalt v. American Smelting & Refining Company, 3 F. (2) 658, 660, affirmed 10 F. (2) 98, 99 41
Hartog v. Long, 47 F. (2d) 369 19
Honolulu Oil Corporation v. Halliburton, 306 U. S. 550. 53
Hurn v. Oursler, 289 U. S. 238, 240 60
I. T. S. Rubber Co. v. Essex Rubber Co., 272 U. S. 429, 443 41
Kaiser v. General Phonograph Supply Company, 171 Fed. 432 58
LeRoy v. Tatham, 14 How. 156, 174-6 46
Mast Foos & Co. v. Stover Mfg. Co., 177 U. S. 485 60
McCarty v. Lehigh Valley R. R., 160 U. S. 110, 116 34
McCarty v. R. R. Co., 160 U. S. 110, l. c. 116 ..... 31, 39
Paul E. Hawkinson Co. v. Carnell, 112 F. (2d) 396, 398, C. C. A. 3 58
Permutit v. Graver Corp., 284 U. S. 52 ..... 27, 32, 33, 35, 38
Peters Patent Corp. v. Bates & Klinke, 295 U. S. 392, l. c. 394 59
Schultz Belting Co. v. Belting Co., 40 F. 156 51
Smith v. Hall, 301 U. S. 216, 227 ..... 46, 53, 55, 56, 59
Stearns v. Russell, 85 F. 218, 224, C. C. A. 6 34
Stilz v. United States, 269 U. S., l. c. 147 43
Tilghman v. Proctor, 102 U. S. 711 50
Topliff v. Topliff, 145 U. S. 156 51

U. S. v. Anciens, 224 U. S., l. c. 322 43
White v. Dunbar, 119 U. S. 47, l. c. 51-52 .....31, 38, 39
Wm. B. Schaife & Sons v. Falls City Woolen Mills Co., 209 F. 210 34

Statutes Cited.

R. S. 4886 .....44, 45, 56
R. S. 4888 (35 U. S. Code 33) 30, 33, 38, 59
R. S. 4920 45
U. S. Code, Title 28, Sec. 347 3

Textbook Cited.

Walker on Patents, 6th Ed., Sec. 106, p. 130 50
Walker on Patents, 6th Ed., Sec. 107, p. 131 51

IN THE

SUPREME COURT OF THE UNITED STATES.

OCTOBER TERM, 1940.

No. 9.

THE SCHRIBER-SCHROTH COMPANY,

Petitioner,

vs.

THE CLEVELAND TRUST COMPANY,
CHRYSLER CORPORATION,

Respondents.

No. 10.

THE ABERDEEN MOTOR SUPPLY CO.,

Petitioner,

vs.

THE CLEVELAND TRUST COMPANY,
CHRYSLER CORPORATION,

Respondents.

No. 11.

THE F. E. ROWE SALES CO.,

Petitioner,

vs.

THE CLEVELAND TRUST COMPANY,
CHRYSLER CORPORATION,

Respondents.

PETITIONERS' BRIEF.

THE OPINIONS OF THE COURT BELOW AND OF THIS COURT.

These cases are here for the second time. In its previous decision, 305 U. S. 47, this Court reversed the Circuit Court of Appeals and remanded the causes for further proceedings.

After the decision of the Court of Appeals on the remand, this Court again granted certiorari. 310 U. S. . . .

These three suits were brought against Petitioners (three piston dealers, customers of Sterling Products Company of St. Louis, Missouri) for infringement of five patents.* In all, six different piston structures were accused as infringements (R. 1095-6).

The cases were consolidated and tried before a Special Master, who found all five patents invalid—and if valid, not infringed. The report of the Special Master, at R. 1092-1189, includes Findings of Fact and Conclusions of Law (R. 1096-1109). Respondent's exception to the Special Master's report were overruled, and the Master's Findings of Fact and Conclusions of Law adopted as those of the District Court (R. 1229).

Upon appeal to the Circuit Court of Appeals, the decision of the District Court was in part reversed, holding two patents (Gulick and Maynard) valid and infringed by one of the accused structures, Exhibit 1. 92 F. (2) 330 (R. 2331-2334). The Circuit Court of Appeals dismissed the cases without prejudice as to the other three patents, including the Jardine patent, which is the only one involved in the instant proceeding.

Upon certiorari, this Court reversed and remanded the causes (305 U. S. 47).

Upon remand the Circuit Court of Appeals held (108 F. [2] 109, R. 2396-2406) the Gulick and Maynard patents (as well as the Mooers and Schmiedeknecht patents) to be invalid, but held the Jardine patent to be valid and infringed by Exhibit 1, the same piston which had previously been held to infringe the Gulick and Maynard patents. In effect,

*Mooers, R. 1310; Schmiedeknecht, R. 1306; Gulick, R. 1284; Jardine, R. 1292; Maynard, R. 1300; stated in the order of their filing dates.

Note. The references are to pages of the Record as they appeared in the Court of Appeals. Emphasis in quoted parts is ours.

the Circuit Court of Appeals treated the Jardine patent as covering the same subject matter which was putatively protected by the prior, but now invalid, Gulick patent.

Only the Jardine patent is involved in this proceeding.

For the convenience of this Court, the previous decision of this Court, and both decisions of the Circuit Court of Appeals, are reproduced and filed herewith as a separate pamphlet. The Decisions of the Circuit Court of Appeals will herein be referred to as "First decision" and "Second decision."

JURISDICTION.

These cases are here on Writs of Certorari to the Circuit Court of Appeals for the Sixth Circuit under the provisions of U. S. Code, Title 28, Section 347. The judgments of the Circuit Court of Appeals were entered October 6th, 1939 (R. 2396). The petitions for the Writs were granted by this court on March 25th, 1940. 60 S. Ct. 710, 310 U. S. ....

STATEMENT OF THE CASE.

The Parties.

Respondent,* The Cleveland Trust Company, is a banking corporation holding title (under a trust agreement, R. 1345) to a pool of some eighty patents, R. 2241-2, relating to pistons, particularly of the type employed in internal combustion engines for automibiles. The patents included in the pool were assigned to Respondent by a number of parties, including manufacturers of pistons. The Jardine patent here involved was assigned to Respondent by Aluminum Company of America, R. 1322.

*The Cleveland Trust Company is herein referred to as "Respondent," Chrysler Corporation having been but a nominal and unwilling plaintiff.

Respondent entered into an agreement (Exhibit 38b, R. 1382) in 1924, whereby it granted to Aluminum Company of America an exclusive license under all patents covering aluminum pistons then or thereafter owned by it. In the same instrument Aluminum Company agreed to convey to respondent (subject to such license) all patents relating to pistons per se then or thereafter owned by it, R. 1391; and the Jardine patent was brought under that agreement before it issued by assignment as noted above, R. 1322. There are collateral and sublicenses to Bohn Aluminum & Brass Corporation, R. 1414, and to Aluminum Industries, R. 1408, both piston manufacturers. All of these piston manufacturers own shares of beneficial interest in the pool, R. 271; Aluminum Company and Bohn Company in their own names and Aluminum Industries through its officer and principal Hater. All pay royalties to the pool on aluminum pistons made by them and the proceeds are thereafter paid back to the beneficiaries, R. 274.

Petitioners are located in the Cleveland District and are dealers in pistons made by Sterling Products Company of St. Louis, Missouri, which company has defended these suits.

The Second Decision of the Court of Appeals.

In holding the claims in issue of the Jardine patent valid, the Court of Appeals found Jardine's contribution to reside in a combination, including "**flexing webs,**" as **essential elements** in the patented combination and distinguishing over the prior art; in fact, the Court of Appeals assigned to Jardine the contribution it had previously supposed the Gulick patent to disclose and claim. In holding the Jardine claims in issue valid, the Court **read "flexing webs" into the claims,** Second Dec. p. 6, disregarding the fact that "flexing webs" are not mentioned

in any of the claims of the Jardine patent, but mentioned only in the description.

The Court of Appeals apparently held the Gulick patent ineffective against Jardine, although of an earlier filing date, because of failure of the original Gulick application to describe the webs as laterally flexible, Second Dec. p. 5, although the Court of Appeals in its first decision (p. 10) had considered the Jardine piston as one in which "he cut away all of the skirt portions at the webs, extending the latter to nearly the length of the skirt parts or slippers," R. 2391, although that had already been done by Ricardo, R. 1647 and 1718.

The Long patent 1,877,772, R. 1736, was apparently also held ineffective against Jardine, Second Dec. p. 7, although having an earlier filing date, because it did not describe "flexing webs." The Court of Appeals so held, even though as noted above, the Jardine claims in issue do not mention "flexing webs," and even though Jardine surrendered claims to flexing webs after interferences with Gulick, Long and Hartog in which Jardine lost.

The Long commercial pistons, Exhibits E, F, G, produced in court, and whose dates of use as prior to Jardine were not questioned by the Court of Appeals and which Respondent's own expert conceded had webs laterally flexible, were held ineffective because the Court of Appeals supposed their capability of flexibility was not "then understood," and supposed they were not "known to have that quality" (Second Dec. p. 8).

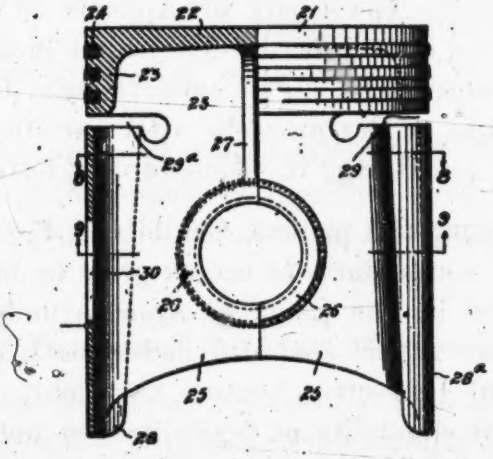
The Hartog patent 1,842,022, R. 1798, which the Court of Appeals found (Second Dec. p. 8) "prior to Jardine" was held not effective against Jardine, even though it describes, as well as claims "internal yielding ribs," because Hartog's thought was "not of the bending or flexing straight ribs," and because "it is a mere paper patent without influence

upon the art"; although the Court of Appeals said in its first decision, p. 11, that "Jardine was without substantial commercial recognition and none of the accused devices are slipper pistons."

The Jardine Patent and Its History.

The Jardine piston (see cut below) comprises a head 21; having a flange 23 provided with grooves 24 for the ordinary piston rings. **Webs** 25 extend from the head and are provided with bosses 26 for a wrist pin. **Slippers** 28 and 28a, also called "guide segments" or "curved guide members," are mounted on these webs. Slots 29 and 29a separate the slippers circumferentially from the head; **these slots extend into the webs for considerable distances and**

Jardine



inwardly beyond the inside of the head flange 23, so as to permit the web extensions beyond the ends of the slots to flex. These slippers are each provided with a longitudinal slot 30.

This piston is stated in the original specification to be a piston "of the so-called **slipper** type," R. 2031,** as dis-

**This expression was later canceled by amendment dated January 24th, 1922, R. 2047.

tinguished from the **full skirt** type. Indeed the Court of Appeals, in its first decision (pp. 10 and 11), refers to the Jardine piston as having "slippers," and that "none of the accused devices are slipper pistons" (p. 11).

Not a single one of the original Jardine claims, R. 2034-7, specified "**flexing webs,**" though conceded by the Court of Appeals in its second decision, page 9, to be the **distinguishing feature** of the Jardine patent over the prior art, and although that feature is not found in any of the claims in the patent as issued.

It was not until April 30, 1923, that Jardine added claims specifying "flexing webs" or synonymous expressions, such as, "yielding ribs," "yielding arms," "skirt carriers susceptible of being slightly flexed radially," "joining means being resiliently yieldable," "means for yieldingly connecting said skirt sections with said head," R. 2067-8. However, these claims were not only copied from pending applications of other parties, but Jardine went into interference with such parties, including Gulick, Long and Hartog, on such claims, as follows:

Interference		Jardine Claims
49570 (R. 2071-3)	Gulick, Long, Hartog	15. 16E (R. 2067)
49572 (R. 2076-8)	Gulick, Long, Hartog	19. 20E (R. 2068)
49578 (R. 2086-8)	Long. Hartog	18. 19E (R. 2067)
49579 (R. 2088-90)	Long, Hartog	17. 18E (R. 2067)
49581 (R. 2090-2)	Long, Hartog	20. 21E (R. 2068)
49583 (R. 2094-6)	Hartog	21. 22E (R. 2068)

Jardine lost each and every one of these interferences as will be seen by the notation "Adverse."* Hence Jardine canceled all of these claims, R. 2208, and thereafter we

*This notation does not appear in Int. 49,583, R. 2095, but the claim appears as claim 4 in the Hartog patent 1,842,022, R. 1801, and it does not appear in the Jardine patent. We also find the claim of interference 49,578 as claim 3 in the Hartog patent.

find no attempt by Jardine to claim "flexing webs," as such or in synonymous terms, and no such claim appears in the Jardine patent.

At no time during the prosecution of the Jardine application was it urged that Jardine was the inventor of a piston having "flexing webs." Even before the interferences, in distinguishing from a Ricardo piston,** the only thing that was stressed was that the splitting of the slippers of the Ricardo piston involved invention, R. 2053, although the thing that was stressed at the trial was that the Ricardo patent did not disclose flexing webs, R. 226.† Even in the amendment canceling the claims in interference, and presenting claims 28 and 31 (now claims 8 and 11 of the Jardine patent held valid by the Court of Appeals), the accompanying argument, R. 2113, stressed other features such as, the integral connection of the webs with the ring flange, and that these webs extend "convergingly inwardly therefrom," which is not even described. There is not even a mention in this final argument of flexing webs, and no attempt was there made to distinguish from Hartog, as the Court of Appeals did in its second decision, page 8, that Jardine's "thought was of * * * the bending or flexing of **straight** (webs) ribs."

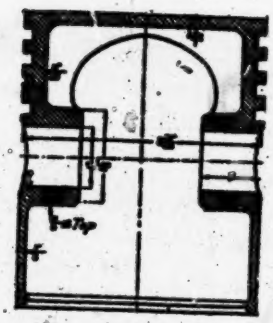
History of Piston Development Before Jardine.

The piston as originally used in automobile engines was what was known as a **Trunk Piston**, a cut of which is shown.

**This piston was the prototype of the Jardine piston and cuts are shown under the next heading.

†The Ricardo commercial piston admittedly had flexing webs (R. 227), as later shown.

Trunk

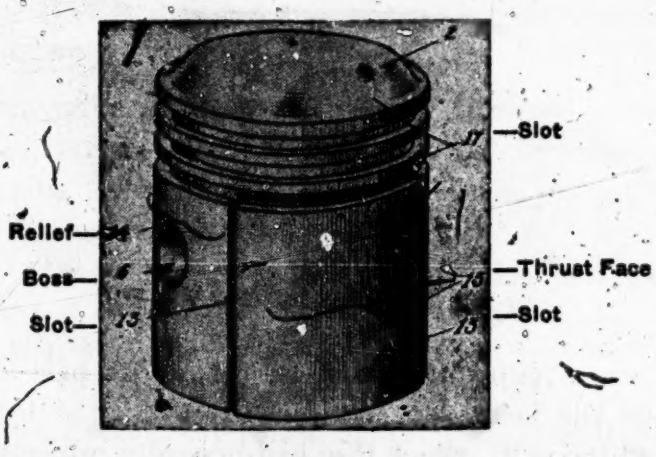


It was a cup-shaped article, the upper part of which formed the head and had ring grooves; the lower part formed the skirt, which also had inwardly projecting wrist pin bosses, while a rib extended from the bosses to the head to strengthen the whole. The head was smaller than the skirt and the latter was smaller in diameter at the hot top than at the cooler bottom. Such a trunk piston, even when made of cast iron, was always hotter than the cylinder; accordingly, various expedients were resorted to to permit the skirt to fit snugly in the cylinder at all temperatures.

The Franquist patent 1,153,902, R. 1688, issued in 1915, and of it the Master said, R. 1119:

> "The specification of this patent is brief, less than two pages, and seems to be the clearest description of conditions encountered, fundamental means to meet those conditions, operation and result, of the many patents and printed publications before the court."

Franquist



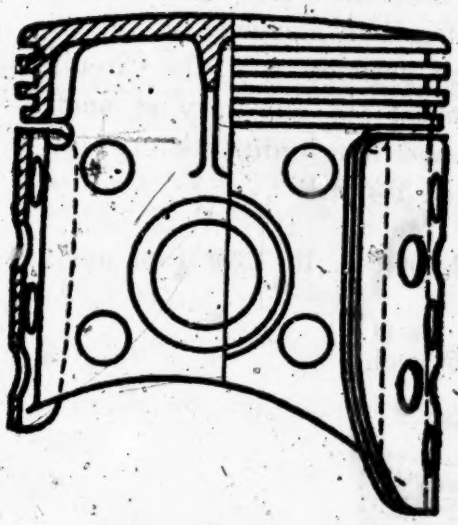
In this piston (see cut) the head was again smaller than the skirt and the head and skirt were separated by a **part-circumferential slot** 17 in the regions of the thrust faces, while the **skirt was relieved**, that is, made of smaller diameter at 14 in the regions of the bosses; furthermore, **vertical slots** 13 permitted expansion to be compensated for. The operation of this piston was about as follows: as the head expanded radially this expansion was not transmitted directly to the thrust faces, because of the part-circumferential slots, but to the skirt in the regions of the bosses, which was, however, permitted because of the reliefs in those regions. The vertical slots permitted further compensation for expansion.*

This patent was acquired by Respondent in 1924, R. 1403, licenses were issued thereunder, R. 1381-1408, 1414, royalties collected, R. 102, R. 2299, suits brought, R. 101, R. 2299, and judgments recovered, R. 1341, even in a suit against Simmons Manufacturing Company, R. 2285, R. 1341 (a customer of Sterling Products Company), because of the sale by that company of a piston identical with Exhibit 1, R. 101. After its expiration, this patent was renounced and denounced by Respondent (R. 247 and 1043).

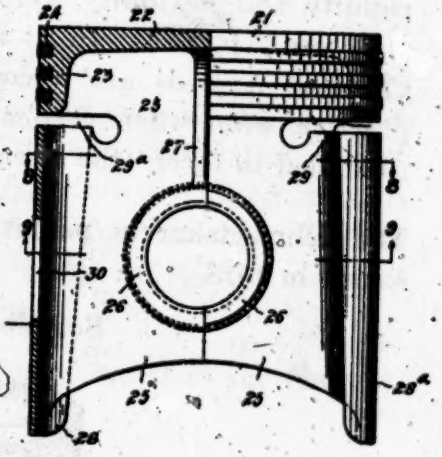
*This Court cited this patent, 305 U. S. 53.

The Ricardo patent 1,294,833, R. 1718, was filed in 1918 and the commercial piston was illustrated that year in the Automobile Engineer, R. 1647 (see cuts).

Ricardo



Jardine



It was what is known as a **"slipper"** piston. **Webs** extended from the head and carried wrist pin bosses, and on these webs were mounted guide sections or **slippers** which were circumferentially separated from the head by slots which went into the webs; in other words, the **skirt parts were cut away in the regions of the bosses** to produce slippers. This piston was used to quite an extent in Europe, R. 218, as an aluminum piston. This piston was really the prototype of the Jardine piston except that the slippers of Jardine were split longitudinally as will be apparent from a comparison of the cuts. Indeed, Respondents' expert admitted, R. 227:

> "I think the construction shown in Fig. 2 of the publication which you have in your hand would show considerable flexibility if the vertical slots were put in the thrust faces.

"Q. Those webs are also thin enough to flex, aren't they, as shown in that publication? A. I think so."

This Court, however, found "Flexibility of the skirt attained by longitudinal slitting was old," 305 U. S., l. c. 53, and that "webs having the inherent property, both of rigidity and flexibility were familiar elements in piston structure," p. 59.** In its first decision, p. 5, the Circuit Court of Appeals also recognized the antiquity of such practice, even when vertical and longitudinal slits were combined to form "the so-called T-slot."

The Schmiedeknecht patent 1,256,265, R. 1306 (see cut), issued in 1918.

Schmiedeknecht

In this piston the bosses were again supported on **webs** and the **skirt was cut away in the regions of the bosses;** however, at the bottom the skirt continued as in Exhibit 1 so as to support the skirt laterally in the regions of the bosses, which overcame the defect of the regular slipper piston in which such piston was not supported laterally and, therefore, resulted in oil pumping; and that was ad-

**That is particularly true as against Jardine filed March 11, 1920, because disclosed in the Pomeroy patent 1,499,073, R. 1804, filed September 4, 1919, and issued to Aluminum Company, and later acquired by Respondent, R. 22., and the Hartog patent 1,842,-022, filed February 16, 1920, and owned by Respondent, R. 1799.

mittedly a defect of the Jardine piston (R. 145). This patent was acquired by Respondent in 1927, R. 1323. It was included in this suit with the contention of infringement by Exhibit 1; the Court of Appeals did not pass upon this infringement but held the patent invalid (2nd Dec., p. 9).

The Long and Gulick Patents.

The Long patent 1,872,772, R. 1736 (see cut infra), bears a filing date of March 7, 1919, and the Gulick patent 1,815,733, R. 1283 (see cut infra), bears a filing date of November 30, 1917; both are, therefore, prior to Jardine (filed March 11, 1920).* Both Long and Gulick were set up in the answer against Jardine, R. 37-8.

Below are reproduced sectional views from the two patents:

Long

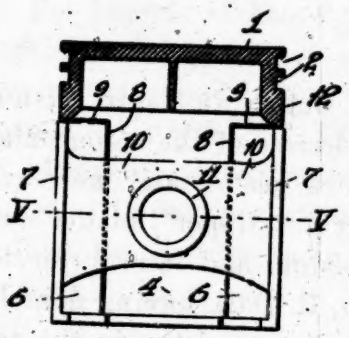


Fig. 3

Gulick

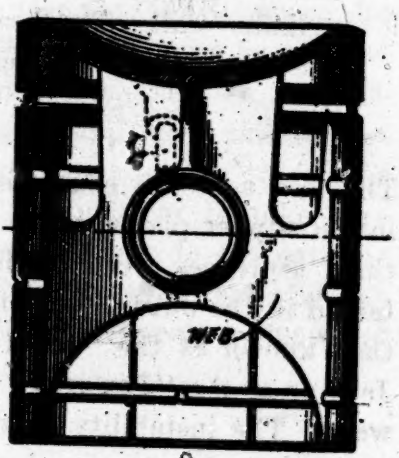


Fig. 1

In each patent the skirt is connected by **webs** to the

*Both constitute statutory bars under R. S. 4486 as to what they disclose. Alexander Milburn Company v. Davis-Bournonville, 270 U. S. 390.

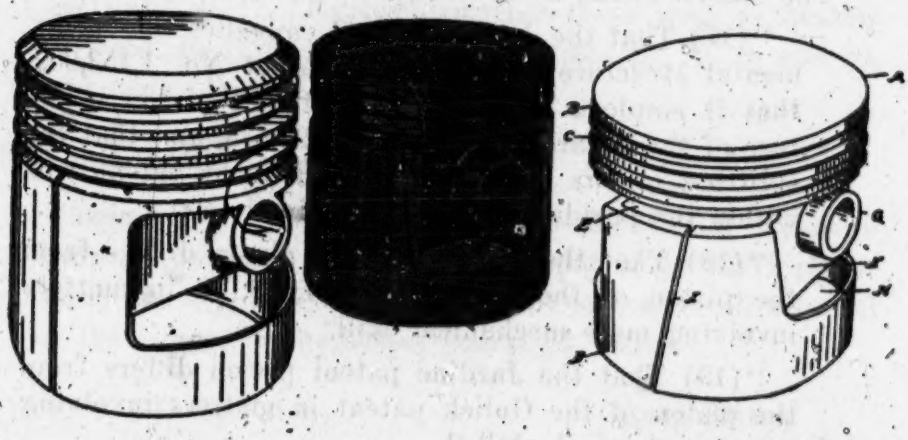
head, and the skirt is **separated** from the head **circumferentially**; in the Gulick patent there is a single **vertical slit** as in Exhibit 1, but in the Long patent there are six **vertical slits**, while in Jardine there are two. In each patent the skirt is a **full skirt** in that it extends circumferentially; however, it will be immediately seen that if the sides of the skirt are cut away in the regions of the bosses, then there will be left in each case a slipper piston just like that of Jardine. Indeed, the Court of Appeals appreciated that in its first decision, p. 10, in showing that the Jardine piston was really an evolution of the Gulick piston by saying:

> "He **cut away** all the skirt portions at the webs, extending the latter to nearly the length of the skirt parts or **slippers**. Horizontal slots partially insulated the slippers from the head and these were split vertically to render them yieldable to contact with the cylinder wall. The head was integrally connected to the skirt only in the region above the bosses."

The first sentence converted the Gulick full skirt piston into a **slipper** piston, while the features of the second and third sentences were in the Gulick piston and were retained in the Jardine piston. But a "slipper" piston was then known as the "Ricardo" piston, and later prior to Jardine as the "**Pomeroy**" piston, R. 1804, having **flexible webs**. The instability of such a slipper piston in the region of the bosses was, however, cured by the Schmiedeknecht piston, by retaining the full skirt at the bottom.

This brings us to the evolution of Exhibit 1, the accused device, which is shown in association with the Schmiedeknecht piston and the Maynard piston; in which Schmiede-

Schmiedeknecht with T Slot | Exhibit 1 | Maynard



knecht piston the T slot of the Long piston has, however, been added.* That evolution even corresponds to Respondent's contention in this case where Exhibit 1 was alleged to infringe the Schmiedeknecht patent.

What has been said with reference the Gulick patent also applies to the Long patent. When the skirt is relieved in the regions of the wrist pin bosses, then we have essentially the piston of Exhibit 1, and such skirts were always so relieved from the very beginning of the piston art, R. 379, 585, 972, by a relief sufficient to take care of expansion in the regions of the bosses to the extreme relief of the slipper piston, and finally with the skirt left full at the bottom as in the Schmiedeknecht patent and in Exhibit 1.

---

*The Master said, R. 1163, with reference to the Maynard patent: "All Maynard did was to put the T-slot of Long on the piston of Schmiedeknecht." In his first decision the Court of Appeals stated, R. 2385-6, "combining the vertical and longitudinal splits into the so-called T. slot were old practices," and in the second decision the Maynard patent absent flexing webs was held as not "marking inventive steps over prior art," p. 5.

The Master's Findings Reference Jardine.

The Master found as to the Jardine patent, R. 1099:

"(17) That the Jardine patent embodies the fundamental structure of Franquist patent No. 1,153,902, that it employs essentially the slipper piston structure of the Ricardo patent No. 1,294,833, and that the splitting of the slippers of the Ricardo patent was within the purview of one skilled in the art.

"(18) That the Jardine patent piston differs from the piston of the Long patent 1,872,772 in matters involving mere mechanical skill.

"(19) That the Jardine patent piston differs from the piston of the Gulick patent in matters involving mere mechanical skill."

Absent flexing webs, the Court of Appeals found no more "inventive step over the prior art" in the Jardine patent, than it found in the Gulick patent.

The Hartog and Pomeroy Patents.

We have shown that Hartog was in interference with Jardine and prevailed on claims specifying flexing webs. Hartog was also in interference with Pomeroy on such claims and prevailed, R. 2279; indeed it was the winning of that interference by Hartog which caused the amendment to the Gulick application importing flexing webs, R. 1875.

The Pomeroy piston, R. 1804, is stated to be a "slipper type of piston—Ricardo," R. 1805. The **webs** are formed so as to make them **flex,** R. 1806, line 19, and while the slippers are not split as in Jardine, this patent shows that Jardine was not the first to provide even a slipper piston with flexing webs.

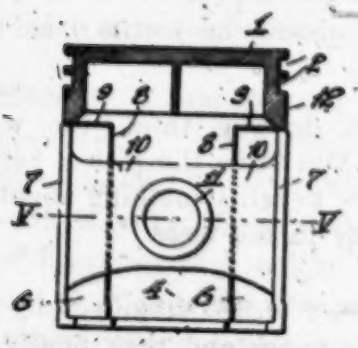
The Hartog piston, R. 1798, was one in which **webs** 12 (called "ribs") extending from the head and carrying

wrist pin bosses 14, also carry arcuate skirt sections 11 **circumferentially separated** from the head at 15 and **split vertically** at 17. Hartog describes these webs as **flexible to yield**, R. 1799, line 64, R. 1800, lines 20, 30, 74 and 94, and even claims this, R. 1801.*

The Long Commercial Pistons.

Below is shown a cut of a Long commercial piston in connection with a cut of the Long patent 1,872,772 previously discussed. The commercial pistons were all relieved in the regions of the bosses (see p. 22, infra).

Long Patent



Long Piston

The Court of Appeals did not question the proof as to the existence and identity of the Long commercial pistons prior to Jardine, and, therefore, evidently found these Long commercial pistons proved as to date and structure. The basis of the Court of Appeals' rejection of the Long commercial pistons as statutory bars against Jardine is

*The Court of Appeals concedes this (2d dec., p. 8). The statement by the court "that it is a mere paper patent without influence upon the art" should be compared with the statement of the Court of Appeals in is first decision (p. 11), "Jardine was without substantial commercial recognition and none of the accused devices are slipper pistons," with the additional fact that the Hartog patent issued to Respondent, who must have thought it so valuable as to purchase it.

that, prior to Jardine, the webs of the Long pistons were not known to have flexing webs, and that those skilled in the art at that time did not understand that they had such flexing webs, the court saying that the webs of the Long pistons were not "known to have that quality" or that this "was then understood" (2nd Dec., p. 8).

Respondents' own expert Jeffries not only testified that he knew that the Long piston was used commercially in the Franklin automobile, not only "like" Exhibits E and F, but that "**those were used**," R. 987. He further testified, R. 940, "I know the Aluminum Company of America made castings for the Franklin Company over a considerable period of time—I think it was some time along 1920, or thereabouts, to about 1926." After again identifying Exhibit F, the first Franklin piston, he testified as follows, R. 1009-1010:

> "Q. What do you say; do you think the webs weren't **flexible enough**? You have the piston before you, so you ought to be able to tell something about it.
> A. No; **there is flexibility in the webs.**"

Petitioners' witness, Stellman, who was employed by the Franklin Company, first as Engineer and then finally as Chief Engineer, after identifying the Franklin pistons, Exhibits E, F and G used in the Franklin automobile from 1919 to 1926, and of Long showing him such a piston in 1916, testifies as follows, R. 570 on cross-examination as to Exhibit F:

> "Q. And it is difficult for you to keep straight just which one was shown you first?
> A. Except that I am very sure that the piston that attracted my attention originally that Mr. Long brought to show us in 1916 had ribs of this type in a general way so that these skirt walls **could flex**. (Referring to Exhibit F.) That is what interested me and made the deep impression on me in 1916."

The above statement of facts, as to the Long pistons, should be sufficient, but in view of the attack upon the Long evidence by respondents' counsel, both in the Court of Appeals and before this court, we will consider the evidence rather in detail.

Further Proof of Long Pistons.

The Master found (Finding 37, R. 1102-3), and as noted by this court, 305 U. S. 55, that the Long pistons "**were in commercial use from 1917 on.**" Respondent's witness Jeffries admitted that the Long piston was the first slit piston in commercial use, R. 986. The Master specifically referred to the physical exhibits, E, F, G and R before the court as having been made and sold by Long, Weems and Franklin Automobile Company.

Exhibits E, F and G were identified by petitioners' witnesses: Venner, who bought and used them, R. 349-350; Chadwick and Royalty, who made them for Long and Weems, R. 378, 338-41; and Stellman, Engineer and later Chief Engineer at Franklin Company, who made the first use of them in a Franklin car in March, 1919, and made a written report, R. 452 and 1629, and later put them in Franklin automobiles, first for replacements beginning April, 1920, and then in regular automobile production beginning November, 1920, R. 456-7.

At the trial the Long piston was put forward by Petitioners as developed as early as March, 1916, and the Master so found, R. 1102, 1174.* As this was prior to Gulick's filing date, Respondent called a number of men, who had been at Franklin Company, to show negatively what had not been done there commercially, although there was no contention on the part of petitioners that there was even a

*The Court of Customs and Patent Appeals so found in the interference, Hartog v. Long, 47 F. (2d) 369, quoted from by the Master, R. 1174.

test Long web type pistor at the Franklin Company before 1919.

These witnesses called by Respondent, however, fully corroborated Petitioners' witnesses as to what Long pistons were in existence, and even used and sold, prior to Jardine's filing date of March 11, 1920. All identified Exhibit F as having been used in a Franklin car—in a thorough test run in **March, 1919**: Murphy, R. 654, 661, and who initialed, R. 661, Stellman's report, Exhibit Z, R. 1629, of that run; Castor, R. 665-8, and Burns, R. 679, 687, 690, who even identified that piston as being the piston of the Long patent 1,872,772, which has a filing date of March 7th, 1919.

The existence and identity of the Long piston, Exhibit F, was established as having been before March 11th, 1920, Jardine's earliest date, not only by Petitioners', but by Respondents' witnesses. Exhibits E, G and R were also established as to identity and date before Jardine's filing date, these pistons distinguishing from Exhibit F by the fact that Exhibit F was cast in a sand mold, while Exhibits E, G and R were cast in a metal mold and had more ribs in the head.

To still further establish the identity, as well as the date of the Long piston, Exhibit F, Petitioners also introduced a pattern, Exhibit GG1, and a core box, Exhibit P.. We will here pause to explain the making of a casting by sand molding. A pattern having the shape of the outside wall of the casting and having a "core print" of the shape of a part of the "core" is employed to produce a cavity in sand. A divided "core box" shaped to the inside walls of the casting and of a part to fit the cavity made by the "core print," is packed with sand and a binder to produce the complete core which is then baked. The core is then put into the mold and the metal is poured into the resulting matrix to form the casting, the casting being removed from the friable sand. By a given set of pattern and core box,

castings can be produced which are duplicates in every respect, and that was done with the pattern and core box for making the Long piston.

The pattern, Exhibit P, was obtained from Gilbert's foundry where it has been since March, 1919, and was fully identified as coming from that source, R. 413-425 and 1640. The core box, Exhibit GG1, was produced by Chadwick, R. 376, from his shop (purchased from Weems, who previously had purchased the shop from Long), and identified as having a date as early as 1918, R. 376, and as having been used by Gilbert's foundry and Walker Leavitt for the making of castings, R. 375-7. This core box was also identified by Gilbert, R. 423, who used it before April, 1917, R. 428. Gilbert took the pattern and the core box, made a mold with the pattern, made a core with core box, put them together and made a casting, Exhibit NN, which is identical with Exhibit F, except that the latter has been machined. That "it would be a miracle" if a mold made by a pattern and a core from a core box would fit together, unless they belonged together, was verified by Gilbert, R. 427.

It will be noted that the pattern was taken away from and returned to Gilbert's foundry on a number of dates, including **February, 1919**, R. 1640-41. Chadwick testifies that Long took pistons like Exhibit F with him to the Franklin Company at Syracuse in **March, 1919**, R. 396, and these pistons were used in the Franklin car on **March 18th, 1919**, Exhibit Z, R. 1629-31. Two days after Stellman's report, namely, **March 20th, 1919**, Franklin Company took a license (R. 1632), under the then pending application for the Long patent 1,872,772, filed March 7, 1919. The pattern and core box were returned by Gilbert on **March 21, 1919**, R. 1642, and Respondents' witness Murphy testified that on **May 3rd, 1919**, there was an order to Walker M. Leavitt for two hundred fifty of these pistons, R. 657. Note here the marking of "Leavitt," not only on the core exhibit

GG-1, as well as on Exhibit F, and that Chadwick also testified that this core box was shipped to Leavitt, R. 377.

The evidence with reference to the mold, the core box, the casting produced by the two, and the piston, Exhibit F, tie them together and with the first use of Exhibit F at Franklin in March, 1919, and there can be no doubt that the date of Exhibit F, as well as its identity, has been established as about one year prior to the date that Jardine filed. Furthermore, all of the witnesses, Petitioners' as well as Respondent's, have identified this Exhibit F.

Although Franklin took a license after March, 1919, use, which was highly satisfactory, Franklin did not proceed to put the Long pistons in **regular** replacement "service" until April, 1920, nor into **regular** automobile "production" as standard equipment until November, 1920. The reason for the delayed adoption of the Long piston as regular equipment by Franklin Company was given by Stellman, R. 456-458. However, as stated by Respondent's witness, Burns, R. 691, even before the service announcement of April 15, 1920, and even in the fall or winter of 1919, the Franklin Company started to machine the Long pistons and put them into cars, and even the "service department took some of them," and they were even offered to and used by Long dealers. During 1919 Weems was making and selling this Long piston, as is verified by Chadwick, who quotes from an inventory of Long pistons on hand, R. 386, and from a record of the royalties paid Long by Weems, both as early as December, 1919, and from a shipment to Franklin dealers the first part of 1920, R. 388. Venner used them as early as 1917, R. 349.

That these Long pistons, Exhibit F, had the reliefs in the regions of the bosses was verified by Stellman, R. 459-492; Venner, R. 345; Chadwick, R. 387; Royalty, R. 436. Respondents' witness Burns even says, R. 685:

"As to reliefs on pistons you had to have some place

to expand it, for it to go into, and there was a hugging action going on, if you didn't grind it elliptical, you had to put a relief in there."

Of course, a relief was so common in pistons that Long's patent counsel did not bother to even mention it in the patents (R. 489). Accordingly, we find no specific statement of a relief in the Long patent 1,872,772. The Franquist patent (R. 1688) had described it as early as 1915. Chadwick says, "it has been done ever since I knew anything about gasoline engines," R. 379. Stellman said those reliefs were in general use in 1915, R. 585. Jeffries admitted that reliefs were used as early as 1917, R. 972.

As to the clearance of the Long pistons as used in Franklin automobiles, this was originally .002 of an inch as admitted by Respondent's witnesses, Castor, R. 666, and Burns, R. 679. Stellman stated that when these went into actual service in April, 1920, the clearance was from .002 to .003 of an inch, R. 455, 1587. This was equal to the clearance of a cast-iron piston in a Franklin car, R. 460, while aluminum pistons used before Long's required a clearance of .008-.0011 of an inch, R. 546. The Franklin engine was an air-cooled engine, and, therefore, got very hot, so that there was the worst possible condition (Stellman, R. 458; Jeffries, R. 987). There is no evidence what the clearance of Exhibit 1 would be in a Franklin car, because it was never used there; in fact, Stellman testifies that he could not use it at all, R. 528.

Respondents' witness Castor testified, R. 672, that the Long piston was used exclusively in the Franklin car from 1920-1929 to a total of 64,000 cars, totaling over 350,000 pistons. In 1929, because of the high increase in compression of the Franklin automobile, which, of course, meant higher temperatures, the Long piston would not stand up any more. The change was not, however, to an all alumi-

num piston like Exhibit 1, but to a piston known as the "invar strut," which is exemplified by Exhibit AAA, and has steel inserts. While Castor testified that at the time of the change the clearance necessary for Long was .005" and from .0025-.003" for the invar strut, the difference here, of course, is between a piston having parts of low expansion steel and a piston made entirely of aluminum.

As against this unquestionable commercial success of the Long piston, for it was admittedly the first split piston in commercial use, R. 986, Respondent offered no evidence of commercial success of the Jardine piston at all. No piston of the Jardine patent, nor even of the Maynard patent, was offered to the Franklin Company, R. 1011. As the Court of Appeals says in its first decision (p. 11): "Jardine was without substantial commercial recognition." Respondent's witness Jeffries admitted that the Jardine piston was subject to oil pumping, R. 145, while the Long piston had an excellent oil consumption record, R. 1629-30. There is no evidence as to the clearance required for the operation of the Jardine piston, but we do know that the Maynard piston, said to be based upon the Jardine piston, could not be used in a Franklin air-cooled engine at all and was rejected by Stellman, R. 548.

The first commercial split skirt piston put on the market by any of Respondents' licensees did not appear until 1923, R. 69. This was five years after the Long pistons had been on the market and three years after it was put into commercial production by the Franklin Company. After 1924, with the acquisition of the broad Franquist patent by Respondent, R. 1403, with the certainty that Long would lose the Gulick interference, and with one of the licensees, Aluminum Company of America, the owner of broad patents covering processes and modes for producing chill cast aluminum alloy pistons and even cover-

ing the pistons per se*, the coterie of licensees were in a position to drive the Long piston off of the market, particularly since the Long pistons had to be chill cast as were those put into production by Franklin Company in 1920, Exhibits E and G. Long was actually sued by Respondent for infringement, R. 2261, and the Bill was not dismissed until he agreed to buy castings from Respondents' licensees, R. 290; in other words, thereafter Long was in competition with manufacturers from whom he had to purchase his castings.

The Accused Piston, Exhibit 1.

The Court of Appeals said in its first decision, p. 11:

> "Jardine was without substantial commercial recognition and none of the accused devices are slipper pistons, since whatever Jardine contributed to the art, if anything, is said to be incorporated in Maynard and since the really important infringement is said to be the copying by the defendants of the commercial embodiment of Maynard, we feel under no necessity at this time of ruling upon the validity of the Jardine patent or the fact of its infringement."

The Master said as to Maynard (R. 1163):

> "All Maynard did was to put the T-slot of Long on the piston of Schmiedeknecht."

The Court of Appeals evidently came to that conclusion in its second decision (p. 5) in holding the Maynard patent invalid as not "marking inventive steps over prior art."

---

*See Aluminum Company of America v. Sterling Company, 66 F. (2d) 958, C. C. A. 8, which enumerates and discusses the scope of the patents. The Master referred to this case, R. 1141. Likewise did Respondent's witness Jeffries, R. 90-91, who also described the procedure, R. 104-5, and indeed states that the advent of the aluminum piston began with that procedure, R. 95, 100. and indeed is what made it successful, R. 144.

The Master's statement (R. 1116) that Exhibit 1 is

> **"a stiff piston,** being a truss construction with a chord spanning an arc, and when this piston scored, resort was had to what is now known as the 'Keystone relief.'"

is equally applicable to the piston (see cuts below) of the Maynard patent, which the Court of Appeals said "made no impression upon the Court as marking inventive steps over the prior art," second decision, page 5.

Exhibit 1

Maynard

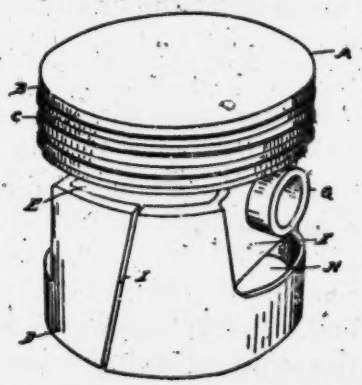


Exhibit 1 comprises a head, a skirt, webs spanning the skirt and carrying wrist-pin bosses, circumferential slots separating the skirt from the head in the regions of the thrust faces, with one of these thrust faces split vertically. However, **the circumferential slots do not go into the webs beyond the inside of the head flange**; accordingly, there cannot be any flexing webs at the top, where such flexure is necessary if compensation for expansion is accomplished by flexure, as distinguished from at the bottom, where web flexure is not necessary, as admitted by Respondents' expert witness, Jeffries, R. 1038. Stellmann showed that there is no web flexing at the top in Exhibit 1 (R. 525-7 and Ex. 4-A, R. 1649) and that, accordingly, there was rubbing at the corners, requiring cut-

ting away of the thrust faces at the corners to produce the "Keystone relief." The Master discussed this (R. 1127).

The history of Exhibit 1 by Respondent's witness shows the following: It was attempted to place upon the market a piston like Exhibit 1, but without the Keystone relief, and Exhibit 21 (R. 1337) was proffered by Respondents' witness Jeffries as a structure showing a Jardine, as well as a Maynard, piston. Jeffries admitted on cross-examination, R. 1045, that his previous statement, R. 178, of extensive use was based upon hearsay, for he admitted that he had never installed nor even seen such a piston, but had seen a drawing; he did not even know whether such a piston ran for 100 miles, R. 1046. On cross-examination, Jeffries produced unfinished castings (Exhibits 3-M and 3-N), which admittedly did not have that Keystone relief, R. 135. On redirect examination, R. 189, Jeffries then produced drawings (Exhibits 21 and 22, R. 1337-40). Of these only Exhibit 22 shows the Keystone relief, but it also bears the notation, "their wire" (evidently Oakland Motor Car Company's), and the **Keystone relief was "added" February 10, 1925**, namely, five years after the filing of the Jardine application. There is no evidence of any piston like Exhibit 1 having gone into use without that Keystone relief.

SPECIFICATION OF ERRORS ASSIGNED AND TO BE URGED.

1. That the Court of Appeals for the Sixth Circuit erred in finding and holding patentable a combination including an essential element not mentioned in the claims of the Jardine patent in suit, and which was in fact surrendered during the prosecution of the application, and in refusing to follow this Court's decision in this cause, 305 U. S. 47, and this Court's decision in Permutit Co. v. Graver Corp., 284 U. S. 52.

2. That the Court of Appeals erred in refusing to hold the Jardine patent in suit invalid, when the feature found to be an essential element of the patented combination was actually present in the same combination in devices proven to have been in prior use and on sale before the earliest proved date of the alleged invention of the patent in suit, and in refusing to follow this Court's decision in De Forest Radio Co. v. General Electric Co., 283 U. S. 664, 51 S. Ct. 563.

3. That the Court of Appeals erred in granting an injunction against infringement of the Jardine patent in suit by the sale of aluminum pistons by Petitioners where the Respondent, a banking institution, was simply an Assignee in Trust under a pooling agreement of some eighty patents, including the Jardine patent in suit, and where Respondent had granted a license to Aluminum Company of America, a corporation, giving it the exclusive right to make, use and sell aluminum pistons under the pooled patents, including the Jardine patent in suit, and where Respondent was never entitled to make, use or sell aluminum pistons in accordance with the Jardine patent in suit.

4. That the Court of Appeals erred in reversing and in not affirming the judgment of the District Court holding the Jardine patent in suit invalid, and even if valid, not infringed, and in awarding any costs to Plaintiff-Respondent.

SUMMARY OF ARGUMENT.

A summary of Petitioners' Argument appears in the captions of the three points, which are set forth in the "Argument." It is not thought feasible to expand the summary beyond these captions without unduly lengthening this brief and resorting to very considerable repetition.

ARGUMENT.

We assume that this court will not consider any questions other than those upon which the Petition for Certiorari is based. However, it was Petitioners' contention before the courts below, and Petitioners are still insisting, that the piston, Exhibit 1, does not infringe the Jardine patent, even if the latter is valid. That is particularly so in the light of the admission of Respondent's witness Jeffries, R. 230-1, that the extension of the circumferential slot inwardly to the extent appearing in Exhibit 1 is not sufficient to make the webs of that piston "flexing webs," and upon which the Master based his Finding 48, R. 1105, of non-infringement of the Jardine patent. Petitioners, moreover, still insist that the Jardine patent is invalid over the prior art as concluded by the Master and the District Court, particularly if "flexing webs" be excluded from the claims, and since the Court of Appeals found that to be the only thing which distinguished the Jardine claims from the prior art.

POINT I.

The Circuit Court of Appeals Treated "Flexing Webs" as Essential Elements of the Jardine Patent, and Held the Patent Valid Notwithstanding That Such Elements Are Not Mentioned in Any of the Claims, But Were in Fact Surrendered During the Prosecution of the Application After Adverse Decisions in Interferences, and Intentionally Excluded From the Patent as Essential Elements, and the Court of Appeals Refused to Follow the Decisions of This Court.

Summarizing the prosecution of the Jardine application in the Patent Office, as shown in the Statement, we find the following: the original application described flexing

webs, but did not claim such webs; thereafter claims, including flexing webs, were added by amendment; thereafter interferences were declared involving claims specifying flexing webs; thereafter decisions were rendered in those interferences adversely to Jardine on such claims; thereafter Jardine canceled all claims specifying flexing webs and stressed other features; finally, the Jardine patent issued with claims, none of which mentions flexing webs. It clearly was not intended, when the patent was granted, that the thing patented depended upon "flexing webs," but rather that the webs might be of any character.

The Court of Appeals found no validity in any of the Jardine claims, absent flexing webs, because, as to the Gulick piston, which the first decision of the Court of Appeals (p. 10) deemed Jardine's prototype, and as to the Maynard piston, which that first decision (p. 11) deemed Jardine's specific form, the second decision found the Gulick patent invalid "as marking no inventive step over prior art," and the Maynard patent invalid as not "marking inventive steps over prior art." The Court of Appeals, therefore, found it necessary to read into the Jardine claims "flexing webs" (second decision, pp. 6, 9), and even (p. 8) "bending or flexing of **straight** ribs * * * on the **cantilever** principle." That, we submit, is contrary to the Patent Statute, R. S. 4888, and the decisions of this Court construing that statute.

The Patent Statute, R. S. 4888 (35 U. S. Code 33), requires an applicant for a patent to not only file a written description of his invention, but to

> "particularly point out and distinctly claim the part, improvement, or combination which he claims as his invention or discovery."

In White v. Dunbar, 119 U. S. 47, l. c. 51-52, this Court stated the purpose of the Patent Statute and the limits of the interpretation of claims as follows:

> "Some persons seem to suppose that a claim in a patent is like a nose of wax which may be turned and twisted in any direction, by merely referring to the specification, so as to make it include something more than, or something different from, what its words express. The context may, undoubtedly, be resorted to, and often is resorted to, for the purpose of better understanding the meaning of the claim; but not for the purpose of changing it, and making it different from what it is. The claim is a statutory requirement, prescribed for the very purpose of making the patentee define precisely what his invention is; and it is unjust to the public, as well as an evasion of the law, to construe it in a manner different from the plain import of its terms."

In McCarty v. R. R. Co., 160 U. S. 110, l. c. 116, it was sought to read a feature into the claim of a patent to save it. This court says:

> "There is no suggestion in either of these claims that the ends of the bolster rest upon springs in the side trusses, although they are so described in the specification and exhibited in the drawings. It is suggested, however, that this feature may be read into the claims for the purpose of sustaining the patent. While this may be done with a view of showing the connection in which a device is used, and proving that it is an operative device, we know of no principle of law which would authorize us to read into a claim an element which is not present, for the purpose of making out a case of novelty or infringement. The difficulty is that if we once begin to include elements not mentioned in the claim in order to limit such claim and avoid a defense of anticipation, we should never know where to stop."

That case was cited with approval by this Court in **Permutit Co. v. Graver Corp.**, 284 U. S. 52, which involved a situation as here, where the Court of Appeals had read into the **claims** of the patent what that court found was an essential element, namely, a "**free**" zeolite bed, while the claims mentioned only a "bed * * * of zeolites." While in that case the specification also failed to describe the bed as a "free" bed, this Court considered both phases (description and claims) of the Patent Statute, R. S. 4888. After stating that the **claims did not** "make mention of a 'free' zeolite bed" and that the patentee had "failed particularly to point out and distinctly claim the free zeolite bed," and that "the patent is void," this Court says (l. c. 59):

> "The absence in the **claims** of a sand bed placed above the zeolites does not imply that the zeolite bed is to be unconfined. The only normal inference from such silence is either that it was deemed immaterial whether the zeolite bed be locked or free, or that if a free bed is preferable, it was not claimed because it lacked novelty."

This Court then states the purpose of the Patent Statute as follows (l. c. 60):

> "The statute requires the patentee not only to explain the principle of his apparatus and to describe it in such terms that any person skilled in the art to which it appertains may construct and use it after the expiration of the patent, but also to inform the public during the life of the patent of the limits of the monopoly asserted, so that it may be known which features may be safely used or manufactured without a license and which may not. The free bed was neither described in the specification nor **claimed** in either Claim 1 or Claim 5."

In the decision of this Court in this case, 305 U. S. 47, the

situation was as in Permutit v. Graver with reference to the **Maynard** patent, in that neither the specification nor the **claims** mentioned "flexible webs" found by the Court of Appeals to be essential elements. This Court, after considering Permutit v. Graver, and quoting the part just quoted therefrom relating to the claim requirement, says (p. 10):

> "We conclude that the court below erred in giving any effect to so much of the Gulick patent as by amendment describes or **claims** the flexible webs, and in treating any of the specifications or **claims** in Gulick and Maynard as referring to such webs."

The above necessarily follows from R. S. 4888, which requires not only a "written description of the same," i. e., of the thing to be patented, but also that the patentee "shall particularly point out and distinctly **claim**" the thing to be patented.

White the specification may be resorted to "for better understanding the meaning of the claim" (White v. Dunbar, supra), and "with a view of showing the connection with which the device is used" (McCarty v. R. R. Co., supra), the question is not simply whether a characteristic* of an element can be read into it; the question is much more narrow, namely, whether

> a feature, found by the Court of Appeals to be an essential element of the patent, in order to hold it valid over the prior art, can be read into the claim by reference to the specification, where that feature was once included in the claims presented by the appli-

*In Permutit v. Graver the limitation "free" really defined the characteristic of the element "bed"; indeed, "free" and "flexible" are related. In Altoona Theatres v. Tri-Ergon, 294 U. S. 477, 489 (later discussed), a broad element "means" was restricted by disclaimer to a specific one, "a flywheel," which was held to constitute a "new element." Of course, an element defined by a characteristic is a different element than one not so defined.

cant, but excluded from claims as finally issued, after adverse decisions in interferences on claims including such a feature.

In this case the Court of Appeals has not only departed from the decisions of this Court, but from a previous decision of the same court, namely, **Wm. B. Schaife & Sons v. Falls City Woolen Mills Co.**, 209 F. 210, where Judge Denison, after stating the **general rule**, that ordinarily a claim should be construed in connection with the specification, states the **exception** as follows (l. c. 213):

> "but where, from the specification or the **history** of the application or the language of the claim it is clear that the patentee intended to claim and the Patent Office intended to grant the broader monopoly which turns out to be invalid, the courts will not, for the arbitrary purpose of saving the claim, read into it a limitation which it does not have."**

The Omission of Flexing Webs from Jardine's Claims Was Deliberate and Intentional.

The history of the Jardine application, as well as the language of the claims of the patent, makes it clear that Jardine intended to claim and the Patent Office intended to grant the broader patent monopoly which now turns out to be invalid. The Jardine original application described flexing webs; thereafter claims including flexing webs were added by amendment; but in interference proceedings, decisions were rendered adversely to Jardine, followed by cancellation of such claims and the retention and submission of claims, none of which mentioned flexing webs. Under such circumstances it cannot now be said that the intention was to include flexing webs in the

---

**Judge Denison cites McCarty v. Lehigh Valley R. R., 160 U. S. 110, 116, and Stearns v. Russell, 85 F. 218, 224, C. C. A. 6, in which the decision was by the later Chief Justice Taft, with whom sat the later Mr. Justice Lurton.

claims. Here paraphrasing this Court's statement in Permutit Co. v. Graver Corp. (l. c. 59, 284 U. S.):

> The only normal inference from such silence is either that it was deemed immaterial whether the webs were rigid or flexing, or that if flexing webs were preferable, they were not claimed because they lacked novelty.

Such inference can be drawn here. Jardine knew that as to him, **flexing webs lacked novelty,** because already disclosed by Hartog and Pomeroy, to say nothing of Long. Jardine also knew when he canceled claims specifying flexing webs on May 7, 1930, R. 2108, that it was really **immaterial whether the webs were rigid or flexible,** because at that time the accused piston (Exhibit 1) was on the market, R. 21. The Master found, R. 1116, that Exhibit 1 was "**a stiff piston,** being a truss construction with a chord spanning an arc," and one in which, R. 1105,

> "automatic compensation is accomplished by what has been termed 'Keystone relief' and not by any web flexibility at the top; that **the circumferential slotting terminates about the inside of the head flange.**"*

We submit that the omission of the claims from the Jardine patent of flexing webs was deliberate and intentional.

The Court of Appeals Found the Distinguishing Feature to Reside in Flexing Webs.

That the Court of Appeals found the thing which distinguished the Jardine patent from the prior art to reside

---

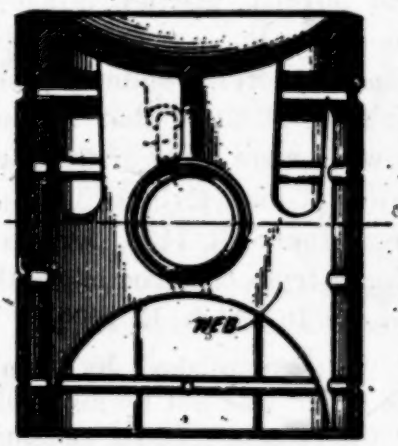
*This finding was based not only on what the Master saw and heard, but was particularly based upon the admission of Respondent's expert Jeffries (R. 231), that with such a construction

> "It would be quite difficult to secure successful operation under such conditions."

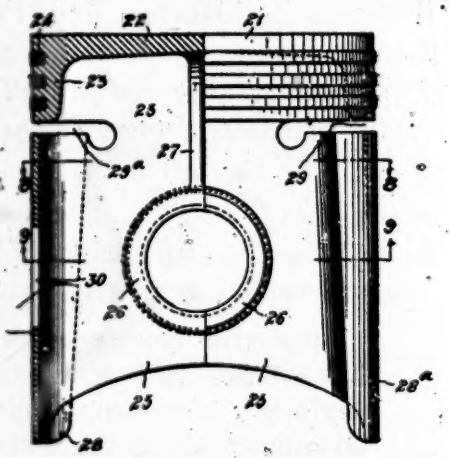
By that Jeffries meant successful operation in accordance with a view that the webs should be flexing rather than rigid.

in "flexing webs" is clear not only from that court's second decision, but also from its first decision; indeed, the prior art as to Jardine was such that there could be no patentable novelty in Jardine's piston, absent flexing webs. We have discussed this prior art in the Statement, so that a mere resumé of the Gulick and Ricardo pistons should be sufficient here:

Gulick



Jardine



The Court of Appeals in its first decision (p. 10) considered Jardine's piston with respect to the Gulick piston as follows:

> "He cut away all of the skirt portions at the webs, extending the latter to nearly the length of the skirt parts or slippers."

That surely was not an inventive act when that is exactly what Ricardo had done to produce, like Jardine, a slipper piston. Indeed, the Gulick piston was, if anything, an improvement over Jardine's piston because the leaving in of the side walls secured lateral stability and therefore prevented oil pumping, which was admittedly a defect of the Jardine piston, R. 145. The fact is that the side walls

were retained in the Maynard piston and Exhibit 1 for that very purpose, R. 81-2.

Surely a step backwards in the art from Gulick to Jardine cannot be considered an inventive act; the Court of Appeals did not so consider it, and therefore found it necessary to read flexing webs into Jardine's claims to sustain them over Gulick, who did not disclose such flexing webs.

Although the Court of Appeals in its first decision had said (p. 11) that "Jardine was without substantial commercial recognition and none of the accused devices are slipper pistons," it proceeded in its second decision (p. 5) upon the basis that

> "Jardine with great clarity and in precise detail explains the principle of operation of his machine and the **flexibility** of its **webs.** The knowledge that was not Gulick's or was by him concealed, is clear to Jardine and by him proclaimed."

The Court of Appeals, after considering the Jardine description, including "**bending** of the **webs,**" and then considering the claims, said (p. 6):

> "While the specimen claims of Jardine, 1, 8 and 11, though reciting the **web** as an element do not incorporate therein the property of **flexibility**, yet in the light of the description they must be so interpreted."

The Court of Appeals then found those claims valid, and stated (p. 9):

> "Our conclusion in this respect is **based upon** the **concept** of a combination with balanced skirt flexibility due to cooperation of longitudinal and vertical slotting with **flexing webs** supporting retracted bosses and connected to a skirt thereby made responsive to physical compression and thermal expansion so as to

> permit of minute clearances between piston and cylinder, a concept perceived in Gulick as amended and minus amendment no longer perceived."

What the Court of Appeals actually did was to practically substitute the Jardine patent for the Gulick patent, after this court had decided that flexing webs could not be read into either the specification or the **claims** of the Gulick application as filed, or of the Maynard patent as issued, and that the Court of Appeals erred

> "in treating any of the specifications or **claims** in the Gulick and Maynard patents as referring to such webs," 305 U. S. 60.

In so treating the Jardine claims as referring to such webs, the Court of Appeals, therefore, not only misinterpreted this court's decision in the cases cited supra, but even the decision in this case, and departed completely from its own previous decision as to the effect of the **history** of a patent application while pending in the Patent Office—here the cancellation of claims specifying flexing webs after adverse decisions in interferences.

The Court of Appeals Read Particular Flexing Webs Into Jardine's Claims, Contrary to This Court's Decisions.

We have seen that in **Permutit v. Graver,** supra, and again in this case, this court stated the object of R. S. 4888 as follows, 305 U. S. 57:

> "The object of the statute is to require the patentee * * * 'to inform the public during the life of the patent of the limits of the monopoly asserted, so that it may be known which features may be safely used or manufactured without a license and which may not.' "

And in **White v. Dunbar,** supra, l. c. 52, that

> "it is unjust to the public, as well as in evasion of

> the law, to construe it (a claim) in a manner different from the plain import of its terms."

The uncertainty of the Court of Appeals as to what is to be included in or excluded from the claims of the Jardine patent appears from the second decision. The Court of Appeals first considered the prior art **generally**; more particularly that which had been found effective against the Gulick and Maynard patents, and apparently found in them no disclosure of flexing webs. The Court of Appeals then proceeded to import "flexing webs" into the claims by construction "in the light of the description." The Court of Appeals next considered the Long patent and the Long commercial pistons, but apparently found no disclosure of flexing webs in the patent description; and although such flexing webs were in the Long commercial pistons, these were held unavailing as statutory bars, because the webs of these Long pistons were not "known to have that (flexing) quality," or that this "was then understood." The Court of Appeals then considered the Hartog patent which the Court found "prior to Jardine, **claims** internal **yielding** ribs" (webs).* The Court then apparently found that the characteristic feature of "flexing webs" was not sufficient to distinguish Jardine from Hartog and, therefore, found it necessary to still further read into the Jardine claims

> "the bending or flexing of **straight** ribs **so proportioned** as to yield to the thermal expansion of the bosses on the **cantilever principle**" (R. 2404).

Surely such a progressive "turning and twisting" of a

*In the Hartog patent, R. 1798, Hartog calls webs 12 "ribs 12, to have a *yielding* effect when in operation both in *lateral* and circular direction," R. 1800, l. c. 29. Claim 5 of Hartog, R. 1801, however, describes "a *flexible* interior rib member," while claim 3 specifies "skirt carriers—susceptible of being slightly *flexed* radially." This latter was the claim in the Hartog interference in which the decision was adverse to Jardine, R. 2086-7.

claim "so as to make it include something more, or something different from, what its words express * * * is unjust to the public, as well as an evasion of the law." (White v. Dunbar, 119 U. S. 51-52.) As this court says in McCarty v. R. R. Co., supra,

> "The difficulty is that once we begin to include elements not mentioned in the claim in order to limit such claim, and avoid a defence of anticipation, we should never know where to stop." (160 U. S. 116).*

It was just such a situation that the Patent Statute was intended to remedy, in order to inform the public "of the limits of the monopoly asserted." An element certainly cannot be imported by construction and not even by disclaimer restricting an element to one having a specific construction or specific characteristics.** Surely if an element may not be imported into a claim by disclaimer, it cannot be imported by judicial construction. That is particularly so where, as here, Jardine lost claims, including flexing webs in interference proceeding; and whether the Patent Office was right or wrong the court

---

*This Court in General Electric Co, v. Wabash Appliance Co., 304 U. S. 364, says 369:

> "The statute seeks to guard against unreasonable advantages to the patentee and disadvantages to others arising from uncertainty as to their rights."

**Altoona Theatres v. Tri-Ergon Corporation, 294 U. S. 477, 489, involved a situation where the claim of a combination patent described an element in broad terms, namely, "means for imparting to the film a rapid and uniform motion", by disclaimer that element was restricted to a specific means, namely, "a flywheel." That this court held was unauthorized by the disclaimer statute, because involving "the addition of a new element to the combination previously claimed, whereby the patent originally for one combination is transformed into a new and different one for the new combination." This court further said, "if a change such as the present could validly be made, it could only be under the provisions of the Reissue Statute, R. S. 4916," l. c. 490.

need not inquire, because the cancellation of the claims amounted to disclaimers.†

As previously stated, the case here is not even as broad as involving simply the importation into a claim of a specific element, or even the characteristic of a specific element described in the specification, but is coupled by the additional limitation that "flexing webs," the very thing sought to be imported into the claims to save them, were surrendered by Jardine by cancellation of claims specifying such flexing webs, after Jardine had lost the interferences on such claims. Of course, no claim was ever made by Jardine that he was the inventor of a piston characterized by

> "the bending or flexing of **straight** ribs (webs) **so proportioned** as to yield to the thermal expansion of the bosses on the **cantilever principle**" (R. 2404)

which the Court of Appeals finally imported into the Jardine claims, after consideration of the Hartog patent with its "yielding ribs" (webs) or as stated in Hartog's claim 5 "flexible interior rib members."

The Court of Appeals Found Infringement by a Piston Which Has No Flexing Cantilever Webs.

The Court of Appeals found Exhibit 1 to be an infringement of this Jardine patent, although the webs of Exhibit 1 have no web extensions at the top which can flex.

---

†I. T. S. Rubber Co. v. Essex Rubber Co., 272 U. S. 429, 443. While that case did not involve cancellation after interference, the principle has been specifically applied to adverse judgments in interferences, Greenwalt v. American Smelting & Refining Company, 3 F. (2) 658, 660, affirmed 10 F. (2) 98, 99. In the above case it was held in the District Court that

> "Whatever is excluded in interference cannot be included in the patent; and whatever cannot thus be included cannot be claimed by construction." 3 F. (2) 660.

The Master specifically found, R. 1105:

> "(48) That in Ex. 1 automatic compensation is accomplished by what has been termed the 'Keystone relief' and not by any web flexibility at the top; that **the circumferential slotting terminates at about the inside of the head flange** and that such a construction and arrangement does not secure the operation contemplated by the Gulick, Jardine and Maynard patents."

This finding was not only based upon the above evidence, but on tests which the Master had witnessed (R. 1092), in accordance with the Order of Reference, R. 44, as well as upon demonstrations to which he refers, R. 1122; furthermore, the above finding was based upon the testimony of Respondents' own witness, Jeffries, who, in stating the metes and bounds of the Jardine patent, testified, R. 230-1:

> "Q. Would you say that the objects and advantages and purposes of the Jardine patent are secured **if the slots 29 were shortened to terminate about the inside part of the ring flange 23?**
>
> A. It would be quite difficult to secure successful operation under those conditions."

Compare, see cuts below, Jardine's slot 29a into web 25 beyond inside of head flange 23. At the bottom, where web flexibility is not important (R. 1038), these webs in Exhibit 1 are braced by the arc of the skirt (as found by the Master, R. 1116) so that the piston skirt will be inflexible there. This is clear from the comparison of the cuts below:

Jardine

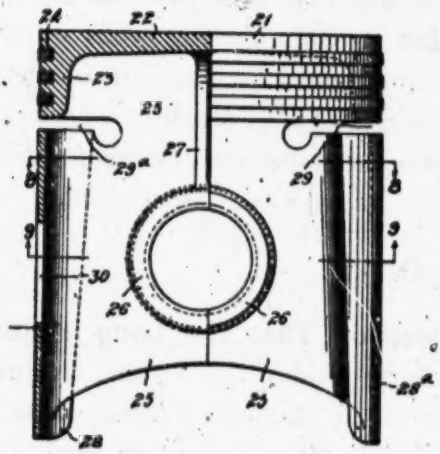


Exhibit 1

Surely Exhibit 1 does not have "the bending or flexing of **straight** ribs **so proportioned** as to yield—on the **cantilever** principle," for, apart from Jeffries' concession, R. 230-1, any web extension into the Keystone relief (upon which Respondent relied in the Court of Appeals) results in a web which is **curved** and **not straight**, and "of a springing resiliency in **arcuate** extensions of his (Hartog's) skirt sections," which the Court of Appeals distinguished from (2nd Dec., p. 8). The Master found non-infringement as a question of fact.*

The procedure, which the Court of Appeals followed, of first importing flexing webs into the claims, then still further importing "bending or flexing of straight ribs—on the cantilever principle," and then finding infringement by Exhibit 1, which is entirely outside of such a construction, has no basis in the law for the determination of either

*Infringement, at least in so far as it relates to correspondence of essential structure and mode of operation, is a question of fact. Bates v. Coe, 98 U. S., l. c. 49; U. S. v. Anciens, 224 U. S., l. c. 322; Stilz v. United States, 269 U. S., l. c. 147. So far as the finding of the Master or Judge, who saw the witnesses, depends upon testimony it must be treated as unassailable. Adamson v. Gilliland, 242 U. S., l. c. 353.

validity or infringement of patent claims. The claims, absent flexing webs, are invalid over the prior art. The claims present the particular straight flexing webs on the cantilever principle are not infringed by Exhibit 1, which has no such webs, as found by the Master, based on the admission of Respondents' witness and the tests which the Master witnessed.

POINT II.

The Court of Appeals' Decision That the Long Pistons Were Unavailing as a Defense Under the Patent Statute, R. S. 4886, Although Prior to the Earliest Proved Date of the Alleged Invention of the Jardine Patent in Suit, Unless the Scientific Explanation of the Mode of Operation of the Long Pistons Was Understood, Is Contrary to the Decision of This Court in De Forest Radio Co. v. General Electric Co., 283 U. S. 664.

As shown in the Statement, what are known as "Long" pistons were proved to have been sold and in commercial use in Franklin automobiles from 1917 on and the Master so found (R. 1102-3), as also stated by this court, 305 U. S. 53. The Court of Appeals did not question the existence and identity of the Long piston prior to Jardine, but rejected them as bars under R. S. 4886, because these pistons, although sold and in use prior to Jardine, were not known to have flexing webs or that such quality of flexibility of the webs was then understood (2d dec. p. 8). Such was the decision even though Respondents' own witness, Jeffries, when shown such a piston, proved as to time and structure, and with which he was familiar from 1920 on, R. 940, 987, admitted that it had flexing webs, 1009-10; indeed, this court noted that concession, 305 U. S. 55. Petitioners' witness, Stellmann, when an engineer with the Franklin Company, testified that he knew of the flexing quality of the Long pistons as early as 1916, R. 570.

The status of the Long commercial pistons is different than is the status of the Long patent as a bar under R. S. 4886. The Long patent operates as a bar as to what it discloses as a writing; the Long commercial pistons are operative as bars, as physical structures. The Long pistons, if proved as to date of existence of structure could be copied, and by Chinese copying at that, so it was immaterial whether the mode of operation of any of them was understood prior to Jardine's filing date.

R. S. 2886 provides that as a prerequisite to a valid patent, the subject matter of the patent shall have been:

> "not known or used by others in this country before his invention or discovery thereof—or more than two years prior to his application, and not in public use or on sale in this country for more than two years before his application."

R. S. 4920 provides for such prior knowledge, use or sale as a defense with notice in the answer. The answer here, R. 37-38, gave such notice as to prior knowledge, use and sale as to the Long pistons by Long and by Franklin Automobile Company.

The Patent Statutes do not say that the scientific explanation of a prior known or used or sold device must have been known to anybody.

In **De Forest Radio Co. v. General Electric Co.**, 283 U. S. 664, this court considered a radio tube which had been used by De Forest prior to the effective invention date of the patent in that suit. This court said (l. c. 686):

> "Whether De Forest knew the scientific explanation of it is unimportant, since he did know and use the device and employ the methods, which produced the

desired results, and which are the device and methods of the patent.'"*

In other words, this court did not require that the radio tube, the physical thing, known and used by De Forest, should have been "known to have that quality" or that this "was then understood," which the Court of Appeals required as a prerequisite to the Long commercial pistons constituting bars under R. S. 4886; and the radio tube was a much more critical thing than is a machined piston casting and was much more difficult of being reproduced.

A Proved Prior Use Is Inherently a Source of Knowledge.

There is a distinction between a prior art patent and a publication on the one hand and a prior use on the other hand.** Where a prior patent or publication is involved, the description must be complete enough to enable one skilled in the art to reproduce what is described; although here again it is immaterial that the prior patent or publication does not give the scientific explanation of the operation of the thing described.† **When, however, it comes to a prior use, then we have the article in existence, which can be duplicated.** Indeed the Chinese are noted for their "Chinese copying" of physical things, even though the oriental copyist may be wholly ignorant of the required

*This case was approved by this court in Smith v. Hall, 301 U. S. 216, 227, as applied to prior use of a process.

**The Court of Appeals recognized the "distinction between what may be disclosed in a patent and what may appear to the understanding of those skilled in the art when it reaches commercial embodiment so that it may be physically reproduced." R. 2403.

†"Even if the asserted difference were established, it is no more than the scientific explanation of what Lilienfeld and others knew, before Langmuir, of the effect of the high vacuum on the discharge, and the methods and devices for procuring the vacuum. It is method and device which may be patented and not the scientific explanation of their operation. See LeRoy v. Tatham, 14 How. 156, 174-6." De Forest Radio Co. v. General Electric Co., 283 U. S. 684-5.

properties and characteristics of the thing to be copied. That particularly applies to things which are capable of being produced by **casting** followed by machining or finishing. We see many instances of the copying of statues and other art objects by casting—even by using the original as a pattern for the exterior and by using the interior for making the core. It is, therefore, immaterial whether those skilled in the art knew what the characteristics were, because of such facility of duplication. If the contrary were true, then the discovery of the scientific explanation of many things, which had been in use, would permit patents to be secured for those old things. As an extreme case the discovery of the microstructure of an old cast metal article, would surely not entitle the discoverer to a new patent for the article as a "manufacture" under R. S. 4886.*

The facts in this case illustrate the basic truth of the above discussion. As shown in the Statement Long's piston, Exhibit F, was first cast in a sand mold, using the pattern, Exhibit GG-1, to make the mold, using the core box, Exhibit P, to make the core, and assembling the mold and core to form the mold cavity, into which was then poured the aluminum alloy to produce the casting. That was in 1919, but Gilbert, in 1932, took this same pattern and this same core box and made the casting, Exhibit NN, which is an exact reproduction of Exhibit F, except that the latter is machined.

But those skilled in the art (pattern maker, molder, machinist) were equally capable of reproducing Exhibit F at any time. Indeed Franklin Automobile Company did so

*Aluminum Company of America v. Sterling Products Corporation, 66 F. (2d) 958, C. C. A. 8, involved a claim for a chill cast aluminum alloy piston as an article of manufacture (l. c. 961). The Court of Appeals (l. c. 962) held the claim invalid in view of a prior knowledge and use of an English chill cast piston imported into this country, even though the claim described this piston in scientific language.

in 1919 and 1920 by producing the Franklin pistons, Exhibits E and G, which are substantial duplicates of Exhibit F, except that they were reproduced in iron molds. Weems and Chadwick were able to do the same thing.

A piston, particularly one that has been in use as Exhibit F, shows that it is much more reliable as a basis for copying than is a drawing or a description, even when contained in a patent. That is because such a physical thing **shows the exact thing**. Its composition, as an alloy, can be ascertained by chemical analysis and duplicated. Its hardness can be determined so that any heat treatment can be applied and the hardness duplicated. If it shows any weakness, additional metal can be added where weakness shows up. We have none of those details ascertainable from the Jardine patent specification. In short, the physical thing is the reliable thing, and that such was appreciated by Congress and the Patent Office is apparent from R. S. 4891, which provides:

> "In all cases which admit of representation by model, the applicant, if required by the commissioner, shall furnish a model of convenient size to exhibit advantageously the several parts of his invention or discovery."

The Long Pistons Proved as Prior to Jardine Admittedly Had Flexing Webs.

Here the Court of Appeals did not question the fact that before Jardine's earliest proved date, which is March 11, 1920, the filing date of his application, the Long pistons of the character represented by Exhibits E, F, G and R were in existence; for that was in accordance with the testimony of Petitioners, as well as Respondent's witnesses, as shown in the Statement. The basis of the rejection of these Long pistons as statutory bars to the Jardine patent was simply that the webs of these Long pistons were not "known to

have that (flexing) quality" or that this "was then understood" prior to Jardine's earliest proved date.

But the Long pistons, the physical things, were before the court and capable of reproduction by anyone skilled in the art and were so reproduced as shown by the successive reproduction of Exhibit F and the Exhibits E, G and R. The sole question is, therefore, do the Long pistons before the court have "flexing webs"? We have here the admission of Respondent's expert witness Jeffries that the Long piston, Exhibit F, has such flexing webs. As shown in the Statement, Jeffries was not only familiar with the Long pistons in 1920, the year Jardine filed, but that Aluminum Company of America made castings for those pistons for Franklin beginning with that year and continuing to 1926. Jeffries testified without qualification:

> "Q. What do you say, do you think the webs weren't flexible enough? You have the piston before you, so you ought to be able to tell something about it?
> A. No, there is flexibility in the webs" (R. 1009-1010).*

The question was not whether these webs were "flexible," but whether they were "flexible enough." The double negative, "weren't" and "no," makes the answer "yes," that they were flexible enough, which obviously meant flexible enough when the piston was used in the cylinder of an automobile engine, and the Court of Appeals obviously so understood it.

That admission of Jeffries should settle the matter that the Long piston, Exhibit F, whose existence, prior to Jardine's earliest proved date, was not questioned by the Court of Appeals, had flexing webs. It is immaterial whether it was known to anyone who used or sold these

*He was able to do that because Petitioners furnished a clamping device, Exhibit 3-I, which was used to test the various pistons.

Long pistons prior to Jardine's proved date, that these pistons had flexing webs. Even if Long and the engineers of Franklin Motor Company or others were ignorant of that fact** (as De Forest was of the reason why his radio tube worked), the Long pistons did work successfully from March, 1919, to 1926 in the Franklin automobile, and the fact that it may not have been known until the day of the trial, why they worked, is immaterial.

The Court of Appeals' Requirement of Knowledge or Understanding of Quality Is Contrary to This Court's Decisions.

The Court of Appeals, disregarding the decisions of this court in the De Forest-General Electric Case, seeks to establish a different rule by analogy, relying upon statements in Walker on Patents, Sixth Edition, based upon earlier decisions of this court, which do not apply here as shown by Walker in the very sections referred to by the Court of Appeals.

While Walker says, Section 106, p. 130:

> "Novelty is not negatived by any prior accidental occurrence or production, the character and function of which was not recognized until later than the date of the patented invention sought to be anticipated thereby."

Walker cites Tilghman v. Proctor, 102 U. S. 711, a process case involving manipulation and where the tangible thing did not remain in existence. But Walker in the same section makes the following distinction applying even to a process and so applied by this court in the De Forest-General Electric Case, which also involved process, as well as article claims:

**It was shown in the Statement that Stellman was not ignorant of that fact. R. 570.

> "But novelty is negatived by proof of prior use of a process, where that use was understood in point of method, though not correctly understood in point of result" (p. 131).

One of the cases cited by Walker is **Schultz Belting Co. v. Belting Co., 40 F. 156**, appeal dismissed, 154 U. S. 516. That case involved, as a new article of manufacture, "leather having tanned surfaces and an interior of pliable rawhide" (l. c. 157). The evidence showed that incompletely tanned leather had been in public use and on sale; that, of course, was the article of the patent, which was, therefore, held invalid.

Walker also says, Section 107, p. 131:

> "Novelty is not negatived by anything which was neither designed, nor apparently adapted, nor actually used, to perform the function of the thing covered by the patent."

Walker cites Topliff v. Topliff, 145 U. S. 156; but the statement in this Court's decision, l. c. 161, relied upon by Walker, had reference to a disclosure in a **prior** Stringfellow and Surles **patent** (see l. c. 160), and had no reference to a **physical thing**, which necessarily has the opposite of Walker's statement in that it

> was designed, adapted and actually used to perform the function of the thing covered by the patent,

namely, the design and adaptation of a piston to operate in a cylinder so as to automatically compensate for expansion, whether or not the designer understood why the result was obtained.

Furthermore, Walker continues, after making the above quoted statement, and says:

> "but this rule cannot govern any case which lacks either of the circumstances upon which it is founded,

for negation of novelty is not averted by the mere fact that the inventor of the prior device did not design it to perform the function of the patented device, nor by the mere fact that its ability to perform that function is not apparent to every beholder, nor by the mere fact that it was never actually used for that purpose, nor by any two of these facts combined'' (l. c. 131-132).

This court apparently appreciated the above by referring in its decision in this case, 305 U. S. 55, to ''the Long pistons, whose webs were concededly laterally flexible.'' Although the above statement had reference to the year 1922, in connection with Gulick copying the Hartog claims, Jeffries' concession was of a physical thing, Exhibit F, whose existence before Jardine's proved date was not questioned by the Court of Appeals. The Court of Appeals, however, said, in considering the statement of this court's opinion just quoted, that such observation of this court was not ''to be taken as a conclusion that the webs were flexible in use'' (2nd Dec., p. 7); however, we have previously shown, supra, that Jeffries' concession (R. 1009-10) was to that effect. Furthermore, the Court of Appeals had previously said, in considering this question of flexibility, ''probably no one has seen an automobile piston reciprocating in its cylinder'' (2nd Dec., p. 4). Respondent offered no test of any Jardine piston or of the accused piston (Exhibit 1) in an engine in order to determine their quality or whether the piston webs were flexible in use, but the tests of the Long, Franquist and Exhibit 1 were made with the clamping device, Exhibit 3-I, while no such test was made of the Jardine piston at all.

The Jardine Piston Is a Step Backwards in the Art.

We have shown in the Statement, p. 22, that the Long pistons were always relieved in the regions of the bosses

before Jardine filed, and that such a relief was a common expedient practiced as early as 1915, and that it was deemed unnecessary to show such relief in the Long patent.*

The Court of Appeals also showed that the Jardine slipper piston was produced from the Gulick piston when "he cut away all the skirt portions at the webs extending the latter to nearly the length of the skirt parts or slippers." But that had been done by Ricardo, while in Exhibit 1 these skirt parts are put back at the bottom as had been done by Schmiedeknecht in order to prevent oil pumping (R. 81-2). Indeed, the Court of Appeals' statement applies verbatim to the piston of the Long patent or the Long commercial pistons. The Jardine piston is in fact a step backward in the art as to Gulick and Long and never went into use.

The Evidence Establishes the Long Pistons Prior to Jardine.

While the Court of Appeals did not question the existence of the Long pistons before Jardine's earliest date, we have nevertheless discussed the evidence in the Statement. While we appreciate, as was said by this court in the Eibel Process Case, 261 U. S. 45, 60, "that evidence to prove prior discovery must be clear and satisfactory," the evidence here is certainly of such a character and is even more clear than the evidence which this court deems sufficient in Smith v. Hall, 301 U. S. 216.

While, of course, Exhibit F, to which we can limit our discussion, bears no date, it was identified by Petitioners', as well as Respondent's witnesses, as a piston which was

*In Honolulu Oil Corporation v. Halliburton, 306 U. S. 550, this court decided that the use of an old expedient "is necessarily implied from the language of the Franklin patent. Detailed description by Franklin was not necessary." l. c. 559.

used in the Franklin car in 1919, a year before Jardine filed, and even Respondent's witness Jeffries recognized it as having been made by Aluminum Company of America in 1920 for Franklin Automobile Company. Without any substantial change it was used in the Franklin automobile until 1926. Chadwick produced the pattern and core box used which produced it, and that this is true is self-evident from the fact that the casting, Exhibit NN, produced by the employment of the pattern and core box is a duplicate of Exhibit F, except that Exhibit F is machined. The Long patent, 1,872,772, with its filing date of March 7, 1919, is a duplicate of this piston, except that it does not mention the relief in the regions of the bosses, nor that the webs are flexible. Venner made an improvement prior to February 16, 1920, R. 1603, for which he filed an application on April 12, 1920 (R. 1595), and the castings for which were made by the Aluminum Company of America, R. 353, before February 16, 1920, R. 352,—and Venner was then familiar with the Long piston, R. 353. Aluminum Company of America, who made the castings for Venner's piston, as well as the Long pistons, both in 1920, did not dispute these facts, although it would have been so easy to do if the facts were not as stated by Petitioners and even Respondent's witnesses.

There is no doubt at all but that this array of evidence, the items of which check and interlock, establishes not only the existence of the Long piston, Exhibit F, at least a year before Jardine's earliest proved date of March 11, 1920, but that this Long piston, Exhibit F, had flexing webs at that time. The date of the pattern and of the core box and their use in producing Exhibit F have been established as before that date; the casting, Exhibit NN, produced by it is a duplicate of that Exhibit F and has the same webs, and Exhibit F admittedly has flexing webs.

The Long Pistons Were Commercially Successful Prior to Jardine.

That this Long piston was not only operative, but highly successful commercially, is not only evidenced by the fact that from 1917 to 1923 it was the only piston which had a split skirt and automatically compensated for expansion, but its use in the Franklin engine from 1919 to 1926 to the extent of over 350,000 pistons established even extensive commercial successful use of this piston beyond a doubt. The fact that in 1926 it was replaced by a steel strut piston does not detract from it, particularly when we consider the circumstances that Long was literally driven out of the field by Respondent. Apart from that, however, it was to be expected that something else would come along, and this court did not deem that to effect a situation of this kind, Eibel Process case, 261 U. S. 45, 69. However, as noted previously, Exhibit 1 never did replace the Long piston in the Franklin automobile air-cooled engine. Moreover, it is immaterial that the prior use "was neither the best nor as skillfully designed or used as that later employed" by even the patentee of the patent in suit. Smith v. Hall, 301 U. S. 216, 232.

The Jardine Claims Are Invalid Over the Prior Art.

If the claims are taken as they read, which they should be as shown under Point I above, then they are completely anticipated by the Long commercial pistons whether or not these had flexing webs. They are likewise anticipated by the Long commercial pistons, even if flexing webs are read into the Jardine claims, because the Long pistons in use prior to Jardine's earliest proved date actually had flexing webs. It is immaterial whether the scientific explanation of the operation of the Long piston was known before Jardine's date when, as shown by the evidence, these pistons actually had such flexing webs. The Court

of Appeals erred in considering these Long commercial pistons unavailing as a defense under R. S. 4886, whether or not these Long pistons had flexing webs, and further erred in requiring that as a prerequisite to a bar under R. S. 4886 the Long pistons must have been "known to have that (flexing) quality" or that this "was then understood" prior to Jardine's earliest proved date.

The claims of the Jardine patent are also invalid over the prior patents and publications discussed in the Statement, whether or not these claims be construed as having flexing webs. Jardine was not the inventor of a piston having flexing webs, for as this court said, 305 U. S. 59:

> "Webs having the inherent properties both of rigidity and flexibility were familiar elements in piston structure."

The Hartog patent (R. 1798) disclosed flexing webs in a full skirt piston, and Exhibit 1, which the Court of Appeals decided infringed the Jardine patent, is essentially a full skirt piston, like that of Schmiedeknecht, which has the same relief in the regions of the bosses as has Exhibit 1.* The Pomeroy patent (R. 1804) discloses even a slipper piston with flexing webs.

With such flexing webs known as familiar elements, as found by this court, those skilled in the art would naturally have proceeded to make the webs of the Gulick and Long patents flexible, if such web flexibility were desired; and the Court of Appeals in its first decision (p. 10) found that the Jardine piston was readily producible from the Gulick piston by cutting away the skirt parts in the regions of the bosses, when a Ricardo type slipper piston was desired.

The Ricardo piston is the prototype of the Jardine pis-

*In Smith v. Hall, 301 U. S. 216, 232, this court held claims invalid where a patent claim was "stretched" to make out a case of infringement and when so expanded was found in the prior art.

ton, and to split one or both slippers was obvious where the known result of such splitting was desired; for as this court said, 305 U. S. 53: "flexibility of the skirt attained by longitudinal slits was old," and Respondent's witness Jeffries admitted, R. 227, that the webs of this Ricardo piston would flex if "vertical slots were put in the thrust faces."

POINT III.

The Court Below Erroneously Ordered the Issuance of an Injunction Restraining Petitioners From the Sale of Pistons Like Exhibit 1, Which Is All Aluminum.

The second decision of the Court of Appeals (p. 10) and the Mandate (R. 2395) order

> "an injunction restraining manufacture, use, and sale of Exhibit 1 and all substantial equivalents thereof."

Respondent has no such interest in the Jardine patent as to entitle it to an injunction. It is elemental that an injunction should not issue unless the party claiming it can show a definitely threatened invasion of one of his rights. The right which is invaded or violated must be a right of the Plaintiff, and not a right of some one else.

If Respondents should do what Petitioners did (sell aluminum pistons like Exhibit 1) Respondent itself (under the decision of the Court of Appeals) would be infringing the Jardine patent, because in the very same instrument whereby Respondent acquired title to the Jardine patent (Exhibit 38b, paragraph XXII, R. 1391) Respondent transferred to the Aluminum Company of America the exclusive right to make, use and sell aluminum pistons (Exhibit 38b, R. 1382).

As far as aluminum pistons are concerned, therefore, neither Respondent, nor the Trust Estate which it represents, ever has had the right under the Jardine patent to

make, use or sell, or to exclude others from so doing. Having no such right, it is not entitled to an injunction.

The question here is not whether the Aluminum Company of America is an exclusive* or nonexclusive licensee, as the Court of Appeals seems to have thought. Admittedly there are two licensees (other than the Aluminum Company of America) under all the eighty-odd patents held by the Trust Estate. The controlling fact here is that neither Respondent, nor the Trust Estate which it represents, ever has had those incidents of ownership in the Jardine patent which are necessary to entitle it to an injunction when suing alone. Regardless of how many licensees there may be, only Respondent, The Cleveland Trust Company, is in court as plaintiff, and that plaintiff has not the right to make, nor the right to sell, nor the right to use, aluminum pistons, nor does it have the right to license others so to do, and consequently Respondent can have no right to an injunction.

While this question of patent law is novel in so far as this Court is concerned, it has been considered by the lower Federal Courts in Kaiser v. General Phonograph Supply Company, 171 Fed. 432, and Doherty Research Company v. Vickers Petroleum Company, 80 Fed. (2d) 809. In both cases it was held that a mere title holder,** such as Respondent here, was not possessed of those rights which are essential to entitle a party to maintain a suit in equity for an injunction restraining infringement of letters patent. While such a mere title holder may have a claim for money damages against an infringer, that claim may only be prosecuted in an action at law.

Since Respondent has no right to an injunction, the Bills

---

*One may be an exclusive licensee, though not a sole licensee. Paul E. Hawkinson Co. v. Carnell, 112 F. (2) 396, 398, C. C. A. 3.

**In the Doherty v. Vickers Case, the plaintiff was more than a title holder, as he had a license to use.

should be dismissed, for, as this Court held in Peters Patent Corp. v. Bates & Klinke, 295 U. S. 392, l. c. 394:

> "The right to such an injunction underlies the equitable jurisdiction here invoked."

To entertain these suits in equity when respondent has no right to injunction violates Section 384 of Title 38, United States Code.

CONCLUSION.

As shown under Point I, the Court of Appeals actually found that absent flexing webs, the prior art was a complete answer to the claims of the Jardine patent, and only sustained them by reading into each of these claims such flexing webs. Since that was contrary to the decisions of this court, these claims are clearly invalid.

As shown under Point II, the Court of Appeals refused to hold the Long commercial pistons statutory bars under R. S. 4888, because the webs of the Long pistons were "not known to have that (flexing) quality," or that this "was then understood." This was contrary to the decisions of this court; accordingly the claims of the Jardine patent are invalid over these Long commercial pistons.

While we appreciate the fact that this cause is before this court on the questions upon which the Petitions for Writ of Certiorari were based, Petitioners' Assignment of Error 4, is directed to the invalidity of the Jardine patent in suit. In Altoona Theatres v. Tri-Ergon, 294 U. S. 477, 493, this court held two claims of the patent "invalid because of improper disclaimers." In Smith v. Hall, 301 U. S. 216, 232, this court held the patent invalid, where a broad construction of the claims had been obtained in the previous case decided by this court, and where in the second case a prior use was within such broad construc-

tion; and the patentee was not permitted to "narrow it so as to avoid anticipation by showing that the claimed method was used in a particular form of structure not claimed." In Mast Foos & Co. v. Stover Mfg. Co., 177 U. S. 485, this court, on a Petition for Writ of Certiorari, at a preliminary injunction stage, ordered the dismissal of the Bill, because of invalidity of the patent, 1. c. 495. This court can do so in this case.

As to the question of infringement, Petitioners' Assignment of Error 4, is directed to non-infringement of the Jardine patent. If the Jardine patent is construed to cover a piston with "flexing webs," or still more specifically a piston with "the bending or flexing of straight ribs so proportioned as to yield to the thermal expansion of the bosses on the cantilever principle," as the Court of Appeals finally limited the claims, by construction, then Exhibit 1 is entirely outside of such claims in view of Jeffries concession on which was based the Master's finding of non-infringement.

As to point III, determination of that question may not be necessary, if either or both questions I and II are ruled upon in favor of Petitioners. This point III does, however, present an important question of practice in patent cases, particularly in cases involving patent pools. This court passed upon a question in Hurn v. Oursler, 289 U. S. 238, 240, in order to settle a question of practice that the rule of the Circuit Court of Appeals "may not be followed as a precedent," even though the decision on that point was not necessary for the determination of the case upon its merits. Respondent still has over seventy piston patents on which it may seek to obtain decrees for injunctions.

For the reason stated, we urge that the Jardine patent here in suit is invalid, that Petitioners have not infringed,

that Respondent is not entitled to an injunction, and that the decision of the Circuit Court of Appeals for the Sixth Circuit should be reversed.

Respectfully submitted,

JOHN H. BRUNINGA,
JOHN H. SUTHERLAND,
Attorneys for Petitioners.

August 31, 1940.

BLANK PAGE

Office - Supreme Court, U. S.
FILED
SEP 3 1940
CHARLES ELMORE CROPLEY
CLERK

IN THE

SUPREME COURT OF THE UNITED STATES

OCTOBER TERM, 1940.

No. 9.

THE SCHRIBER-SCHROTH COMPANY,

Petitioner,

vs.

THE CLEVELAND TRUST COMPANY,
CHRYSLER CORPORATION,

Respondents.

No. 10.

THE ABERDEEN MOTOR SUPPLY CO.,

Petitioner,

vs.

THE CLEVELAND TRUST COMPANY,
CHRYSLER CORPORATION,

Respondents.

No. 11.

THE F. E. ROWE SALES CO.,

Petitioner,

vs.

THE CLEVELAND TRUST COMPANY,
CHRYSLER CORPORATION,

Respondents.

SUPPLEMENT TO PETITIONERS' BRIEF.

Decisions by the Circuit Court of Appeals for the Sixth Circuit and by This Court in the Above Causes.

JOHN H. BRUNINGA,
JOHN H. SUTHERLAND,
Attorneys for Petitioners.

August 31, 1940.

St. Louis Law Printing Co., 415 North Eighth Street. CEntral 4477.

BLANK PAGE

FIRST DECISION OF THE COURT OF APPEALS,

92 FED. (2d) 330.

Nos. 7223-4-5

UNITED STATES CIRCUIT COURT OF APPEALS

SIXTH CIRCUIT

THE CLEVELAND TRUST COMPANY, CHRYSLER CORPORATION, *Appellants,*

No. 7223 v.

THE SCHRIBER-SCHROTH COMPANY, *Appellee.*

THE CLEVELAND TRUST COMPANY, CHRYSLER CORPORATION, *Appellants,*

No. 7224 v.

THE ABERDEEN MOTOR SUPPLY COMPANY, *Appellee.*

THE CLEVELAND TRUST COMPANY, CHRYSLER CORPORATION, *Appellants,*

No. 7225 v.

THE F. E. ROWE SALES COMPANY, *Appellee.*

APPEALS from the District Court of the United States for the Northern District of Ohio, Eastern Division.

Decided October 8, 1937.

Before HICKS, SIMONS and ALLEN, Circuit Judges.

SIMONS, Circuit Judge. In a study of the patents and prior art involved in *Waukesha Motor Co.* v. *Willys Overland, Inc.*, 77 Fed. (2d) 906, and *The Perfect Circle Co.* v. *Hastings Mfg. Co.*, 88 Fed. (2d) 813, we learned something of the principles of operation and the mechanics employed in the conventional four-cycle internal combustion engine of the modern motor car. It will

therefore be unnecessary here to repeat what was there said in reference thereto. In the first we considered the explosion chamber, and in the second the piston ring. In the present infringement suit we deal with the piston.

In the rapid reciprocation of a piston within the cylinder, as in the references described, the desirability of maintaining a close fit was obvious and had long been recognized. This was necessary to avoid waste of power through gases being permitted to pass below the piston from the explosion chamber, a condition known as "blow-by," to prevent lubricating oil passing above the piston into the explosion chamber, a condition known as "pumping oil," and to prevent the slapping of the piston in the cylinder, making for a noisy engine and tending to break its parts. On the other hand a too close fit would, because of the expansion of the piston by the great heat generated in the cylinder, cause it to bind or "seize" therein, thus stalling the engine or perhaps even wrecking it.

Cylinders were and generally still are cast of iron, and prior to the period we are here considering pistons were likewise so cast. The disadvantages in this organization were early recognized. Since iron is a poor conductor of heat, the particles of carbon that would form on the cylinder head would become overheated and cause premature explosion in the combustion chamber. Iron is also heavy, and with the great acceleration of piston reciprocation, due to the ever increasing demand for speed, the industry began to cast about for expedients to lighten the pistons. There were numerous efforts and failures in this respect with the conventional iron trunk piston. Lighter metals were considered, but since strength and durability to withstand the great force of rapid explosions upon the piston head and the powerful thrust imparted to its bearing facts by the power stroke of the piston as it imparted energy to the crank shaft were prerequisites, the art was limited to metal that was both strong and durable. It turned, therefore, quite naturally and inevitably, to aluminum. A new and for a long time seemingly insuperable problem at once confronted the automotive engineers, due to the fact that the coefficient of expansion differs greatly in the two metals, and that under heat aluminum will expand much more rapidly than iron. Since the desirable clearance is minute, approximating one one-thousandth of an inch, it was at once clear that an aluminum piston, installed when cold with required clearance in an iron cylinder, would when heated by operation seize, and that a piston with clear-

ance sufficient to avoid seizing would waste power, pump oil, cause undesirable noises, and lack durability.

Ingenious, numerous and varied were the expedients resorted to in an effort to achieve the clearly recognized advantages of aluminum pistons, while at the same time avoiding troublesome results, and equally numerous were the failures, by reason of which a prejudice had developed in the industry against them, and it was said they had had a "black eye."

The Cleveland Trust Company, appellant, is the repository of numerous patent rights assigned to it by inventors and by piston and automobile manufacturers, and it is its contention that the aluminum piston problem was completely solved by some of its assignors, and that a structure embodying the disclosures of the patent to Jardine, No. 1,763,523, granted June 10, 1930, but in a more specific and improved form described in Maynard No. 1,655,968, granted January 10, 1928, but on an application later than Jardine's, had gone into wide commercial use, being accepted by the industry, with the exception of some divisions of the General Motors Corporation, had sold in the tens of millions, and is now infringed by pistons of the appellees. The Jardine and Maynard patents belong to the Trust Company. Conceiving, however, that a Gulick application, which was being prosecuted by the Packard Motor Car Company, would, with its broader claims, dominate both Jardine and Maynard, the Trust Company purchased it and prosecuted it to successful conclusion after numerous interferences, the patent issuing as Gulick No. 1,815,733, on July 21, 1931. The Trust Company also owns Schmiedeknecht patent No. 1,256,265, granted February 12, 1918, and Mooers, No. 1,402,309, granted January 3, 1922, both for pistons, and seven accused devices are all alleged to infringe some of the claims of some or all of the five patents.

The appellees are three Cleveland dealers who have sold alleged infringing pistons manufactured by the Sterling Products Corporation of St. Louis, Missouri. While the manufacturer was named in the original bills of complaint, they were dismissed as to it, it being understood, however, that Sterling Products Corporation was conducting the defense of the three suits. By stipulation they were consolidated below, and all are before this court upon the same record. At the outset only two alleged infringing devices were involved, one a Sterling piston known as Exhibit 1, and the other a Ray-Day piston known as Exhibit 8. During the progress of the trial five additional structures were introduced as infringements. While there is no finding to that effect, it

seems to have been assumed that all of the alleged infringing devices were sold by each of the three defendants. The consolidated cause was referred to a master, whose very detailed findings of fact and conclusions of law were affirmed by the District Judge without discussion and decrees entered dismissing the bills. While the Chrysler Corporation appears as party plaintiff below and as co-appellant here, it has never entered its appearance and its presence in the case as a nominal plaintiff is due to the fact that it owns a half interest in the Maynard patent and was therefore joined as party plaintiff. An issue raised below as to the propriety of Chrysler being made a nominal party is abandoned here, since the defendants have not appealed.

The controversy is involved and has been bitterly fought. The record is voluminous, the exhibits, physical and otherwise, numerous, the patent office history discloses persistent challenge, and of eighty-odd claims fifty-two are said to be infringed. While we have given careful consideration to the briefs and record, it is manifest that the necessities of the case and the desirable limit of an opinion will permit us to discuss only the more salient features of the controversy, with perhaps summary disposition of its lesser issues, for the challenge to the validity of the patents and to the fact of their infringement includes most if not all of the defenses known to the patent law.

We deal first with the patent to Gulick, in agreement with the contention that if valid it is basic. Gulick had been connected with various motor car and motor cycle manufacturing companies in a number of capacities, including that of factory manager. He was also an inventor, having prosecuted some fifty applications in the patent office. As early as 1908 he had a conception of a split and flexible piston, but did nothing more for several years than to make sketches. In 1911 he made some experiments with modified standard iron pistons, giving them block tests in a motor cycle and in an Excelsior motor. The motor was later put into a Renault car and given a substantial road test. These early pistons were scrapped. In 1914 he made his first test with aluminum pistons in an Amplex car, which he used personally for some 4500 to 5300 miles. In 1917, along with other patents and patent applications, Gulick assigned his inchoate rights to the Packard Motor Car Company, and the application for the piston patent was filed by it on November 30th of that year. There followed long discussions with the examiners, administrative reviews, bitterly contested interferences, and appeals to the Court

of Appeals of the District of Columbia (*Long* v. *Gulick*, 17 Fed. [2d] 686), and to the Court of Customs and Patent Appeals (*Hartog* v. *Long*, 47 Fed. [2d] 369). There had also been amendments to the original application at the instance of the inventor's assignee. It was not until July 21, 1931, that the Gulick patent issued with its forty-three claims.

The Gulick patent is for a combination of elements, many, if not indeed all of which, are to be found in the prior art. Nowhere, however, is found his precise organization, and the question at once presents itself as to whether there was exercise of the inventive faculty in the concept of their combination, for that a new result was achieved and a new mode of operation of an aluminum piston in its iron cylinder brought about is not successfully challenged on this record. Gulick separated the smaller ring carrying head of the piston from the somewhat larger skirt by a groove or air gap. This tends to prevent the passage of heat from the head directly to the skirt and permits the bearing faces of the skirt to yield to pressure independently of the head. The wrist pin bosses are pulled inwardly from the skirt periphery and instead of being supported by the skirt are carried from the piston head by depending flanges, thus providing a vertically rigid support for the bosses with freedom of lateral motion in a direction at right angles to the load thrusts on the piston. The surface of the skirt where the bosses are connected to the head in conventional pistons was cut away or relieved, so that the bosses are not directly constrained by the cylinder wall. They are held in place by webs extending in the general direction of load thrusts on the piston. One bearing face of the skirt is slotted vertically from the bottom edge up to and connecting with the air gap. That Spillman and Mooers patent 1,092,870, and Franquist patent 1,153,902 showed air gaps between piston head and skirt, or that splitting the piston skirt vertically or combining the vertical and longitudinal splits into the so-called T-slot were old practices, is not conclusive on the question of invention.

Since the cylinder head is the first to heat, and becomes hotter than the skirt it had always been machined with greater clearance, the control of oil and gas flow being taken care of in part at least by the piston rings, which function as a packing. See *Perfect Circle Co.* v. *Hastings*, supra. The problem of maintaining a close fit between an aluminum piston and an iron cylinder without seizing under heat expansion is a problem involving the skirt, which guides the piston and carries the bearings for the

wrist pin, upon which is exerted the thrusts of the connecting rod through the cycle of reciprocation. To decelerate the flow of heat from piston head to skirt by an air gap was perhaps an obvious expedient in the art. To slit the skirt vertically so that pressure of the cylinder wall would compensate for thermal expansion was perhaps not beyond expected skill in the art. Minute relief of the cylinder periphery in the region of the bosses was shown in Franquist. But to combine insulation of head from skirt, retraction of the bosses from the skirt periphery, connection of such bosses to the skirt with webs laterally flexible and yet so carried from the head as to support the load upon the wrist pin with sufficient strength and rigidity, and to utilize the mechanical force of the cylinder wall upon the skirt and the thermal expansion of the bosses so as to compensate evenly and fully for head expansion and to secure a balanced flexibility of the skirt with no bending concentration at any point therein, discloses, we think, a meritorious concept beyond the reach of those skilled in the art. Franquist, of course, does disclose the broad concept of a flexible skirt. But Franquist gives no hint at all of the Gulick invention. His flexibility was obtained by grooves on the accordion principle, which while they interrupted the outer periphery of the piston skirt, did not destroy its inner unity. Some flexibility no doubt it had, but certainly not in the sense that Gulick disclosed it, and it is doubtful that the Franquist piston could have met the severe tests required by the industry. And of commercial history it has none upon this record.

Probably the most difficult task that confronts a patent court lies in determining whether there is invention in a combination whereof many or all cooperating elements are old, and when concepts, however remarkable when disclosed, have in a rapidly developing art already become commonplace, not only to the expert but to the unskilled. It is not easy after the lapse of years to evaluate advances with the "eye and the understanding" of those in the field when they were made. Inventive concept is an abstraction impossible to define, and so courts have sought for simple rules by which its presence may be detected. These have proved helpful, even though never absolute. Long recognition of an existing problem in any art, and the advantages to accrue to an industry from its solution, coupled with repeated failures to find solution, has ever been considered as highly persuasive of invention when success is finally attained. Sometimes achievement is revolutionary, an abandonment of all previous approaches, and the charting of a

new way to the goal. More often the inventor begins where others leave off, and perceives the vital forward step to which predecessors had been blind. Even then success may not be fully recognized until the world gives acclaim.

The present record is conclusive of the long unsuccessful search for a light weight piston sufficiently durable to obviate the well-known disadvantages of the iron trunk piston in high speed engines. There was much research and experimentation by those most highly skilled, including the engineers of the Aluminum Company, Colonel Vincent of the Packard Motor Car Company, one of the designers of the Liberty engine, and the engineering staff of the Franklin Automobile Company, under the direction of the defendants' expert Stellman, its Chief Engineer. Limited success may here and there have been attained, but the problem in its full sweep was not solved until the Gulick concept, carried forward to some extent by Maynard, with possibly some instruction from Jardine, reached commercial embodiment. Then and then only did the industry by acceptance of the Aluminum Company's piston answering the Maynard drawing and specification, recognize the complete solution of the problem, and the many millions that have since been sold and used have set the seal of commercial approval upon such solution. It is idle to say in an imperfect world that invention should be denied because no piston, not even Maynard, performs perfectly.

It is, of course, axiomatic that commercial success is not of itself conclusive upon the question of novelty or invention, and where such success is fairly attributable to other causes, such as the reputation of the manufacturer, his extensive advertising and superior salesmanship, it will be wanting in persuasiveness. But where no alternative inferences are to be drawn, commercial success is highly indicative of invention. This is so in the usual case where the test of success is acceptance by the public. But it must be here noted if not elsewhere observed, that where success follows acceptance by experts rather than by those unskilled, it is of far greater tribute to the ingenuity of the inventor. It is clearly demonstrated upon this record, if indeed it is not within the field of general knowledge, that the automotive industry in acceptance of new devices upon which success of highly complicated and delicate machinery in the hands of inexpert users must depend, exercises the greatest caution, and things new, whatever their theoretical virtue, will not be considered until they have been subjected to the most rigorous practical tests for efficiency and durabil-

ity. This must be so when failure of one year's product may bring tremendous losses or complete disaster.

So also with respect to the presumption that attaches to the validity of a grant by the Patent Office. Where, as in this case, substantially all pertinent prior art has been cited against the patent, where in hard fought interferences novelty and invention have been challenged, and where priority of conception has been finally adjudicated only upon repeated review in both administrative and judicial forums, the patent should not be stricken down except upon very clear and convincing proof of invalidity. The weight to be given this presumption has been so recently and so thoroughly discussed, and the rule stated in all the varying formulae by which courts have announced and affirmed it, in *Radio Corporation* v. *Radio Laboratories,* 293 U. S. 1, that it is unnecessary here to repeat or to cite additional cases.

In what we have said thus far it is perhaps clear that in respect to novelty and invention over recorded prior art we have concluded the Gulick patent to be valid. But this is not the whole controversy with respect to it. It is the contention of the defendant that the Gulick patent is invalid because abandoned by him prior to his application, and because it had been in public use in this country for more than two years before such application within the purview of R. S. §§ 4886, 4920. The Master so held. His findings were based on the fact that Gulick's 1911 and 1914 pistons had been scrapped, and on inference that Gulick's expressed satisfaction with his 1914 experimentation was conclusive of the completion of his invention in that year. That there had been no formal abandonment or disclaimer is clear. The Master's findings are based upon constructive abandonment deduced from the above circumstances and delay in applying for a patent.

Questions relevant to actual or to constructive abandonment of inventions are questions of fact, *Walker, 6th Ed.,* § 152; *Kendall* v. *Winsor,* 21 How. 330, and much weight must therefore be given to the findings of the Master, who saw and heard the witnesses. Consideration should also be given to the rule that concurrent findings of Master and Judge should not be set aside except for clear error, although this may prove to be an unsafe guide to just decision where exceptions to a master's report are unilluminated by oral argument and a decree entered without elucidation of the reasons upon which it is based. The law, however, in reference to abandonment, requires that every reasonable doubt relevant to any such question should be resolved in favor of the patent, for it does not

favor forfeiture. *Walker*, § 152 and cases there cited. It was said by this court, *Gear Grinding Machine Co.* v. *Studebaker Corp.*, 270 Fed. 934, 936: "Abandonment depends upon intent, actual or imputed. The actual intent did not exist, and the circumstances do not require that the intent be by law imputed as against the truth." That Gulick did not intend to abandon the subject matter of his invention seems to us clear. From the beginning of his experimentation in 1911 he made drawings from time to time, tests with slotted iron pistons and later with slotted aluminum pistons, and was at the same time not only busy in the earning of a livelihood but with plans for the purchase from a receiver of the property of the Amplex Motor Car Company. The scrapping of his experimental pistons was without his knowledge or consent, and the fact that he replaced the experimental pistons of the Renault car with standard pistons before its sale negatives any inference that the experimental pistons were intended to be abandoned. Distinction must also be made between abandonment of the subject matter of a patent and abandonment of crude experimental devices. While Gulick variously expressed satisfaction with the performance of his experimental pistons, it is clear upon review of his entire evidence that what he had then in mind was that they performed satisfactorily in reference to clearance. They had not demonstrated their strength and durability, or that they were properly designed or machined for commercial use.

The Master was largely influenced by the fact that Gulick's clarification of his testimony followed a recess, and gave little credence to it. We have reviewed it carefully. That Gulick's experiments were not completed to the end that a practical piston had been fully designed and tested seems clear. He is in some respects corroborated and in no wise impeached. Mere suspicion as to his good faith is not such clear and convincing proof of abandonment as will satisfy every reasonable doubt and sustain the heavy burden which rests upon those challenging the validity of his patent. The Master did not apply to the evidence on the issue of abandonment that standard of proof required to establish it and so the question is one of law, and the finding must be rejected.

There was no public use of the Gulick invention more than two years prior to the application so as to invalidate the patent. So long as use by the inventor can fairly be considered experimental and collateral to the development of the invention in its complete form, the bar of the statute does not begin to run. *Reo Motor Car Co.* v. *Gear Grinding Co.*, 42 Fed. (2d) 965 (C. C. A. 6). The

emphasis that is laid upon Gulick's use of a car with experimental pistons for business and pleasure for a considerable period does not impress us. Road tests of many thousands of miles are considered necessary to determine the efficiency of an engine and its parts. That such transportation is not wasted does not of itself constitute a public use. As was said in the second *Gear Grinding* case: "We see no principle in the precedents or in the policy of the statute which would require a valuable invention to be lost by permitting the bar to begin to run while the invention . . . is being gradually improved and developed up to the point of ascertaining whether it has real utility. Nor can it rightly be said that a public use of a developing and incomplete invention—incomplete as finally claimed—can nevertheless operate as a public use bar because adding the final element of perfection did not involve invention as compared with the earlier form to which it was added."

We are not convinced that the Gulick application was broadened to include new matter after intervening rights had arisen. This issue was adjudicated in the Court of Appeals of the District of Columbia, 17 Fed. (2d) 365, and the Court of Customs and Patent Appeals, 47 Fed. (2d) 366, 367. With the conclusions there reached we agree. As to the Monckmeir and Schoengarth prior uses, it is sufficient to say without analysis of the voluminous evidence, that they rest mainly upon the uncertain memory of witnesses testifying long after the event, and this does not rise to the dignity of proof requisite to establish prior use. *Barbed Wire Patent Case,* 143 U. S. 275; *Eibel Process Case,* 261 U. S. 45.

Jardine, upon an application filed March 11, 1920, claimed an invention of which the chief object was construction of a light alloy piston which would operate satisfactorily at all temperatures and lend itself to economic methods of manufacture. He cut away all the skirt portions at the webs, extending the latter to nearly the length of the skirt parts or slippers. Horizontal slots partially insulated the slippers from the head and these were split vertically to render them yieldable to contact with the cylinder wall. The head was integrally connected to the skirt only in the region above the bosses. His thought was that since heat expansion tends to increase the diameter of the piston in a direction parallel with the wrist pin bosses, when the skirt around the bosses is removed, the central part of the web is free to move while its ends are restrained and resisted by the skirt faces in contact with the cylinder wall. There is insistent challenge and as insistent defense of the validity

of Jardine. On the one hand it is urged that Jardine is but the slipper structure of Ricardo patent No. 1,294,833, and that it involved no invention to merely slit vertically its skirt parts as disclosed by Gulick and others. The response is that Jardine discloses a combination of inter-related operating parts that goes far beyond Ricardo, is economical to construct and carries the Gulick concept an important step forward. Jardine indicates the forces, thermal and mechanical, which bear upon the flexible web to compensate for heat expansion of the cylinder head, pointing to the web as being in effect a cantilever structure, weakest at its supports. Jardine came to the attention of the Aluminum Company and the Maxwell at a time when Ricardo and other English engineers were trying to modify the Ricardo piston to meet the piston problem. It was thought to give great promise. Tests had been made and commercial manufacture planned when the Maynard piston was presented to them. It appeared so much better that the construction illustrated and described by him was adopted. Since it is the Maynard specific form embodying the basic concept of Gulick that made commercial piston history, since Jardine was without substantial commercial recognition and none of the accused devices are slipper pistons, since whatever Jardine contributed to the art, if anything, is said to be incorporated in Maynard and since the really important infringement is said to be the copying by the defendants of the commercial embodiment of Maynard, we feel under no necessity at this time of ruling upon the validity of the Jardine patent or the fact of its infringement.

Maynard upon a patent application filed January 3, 1931, embodies the Gulick combination of skirt insulation, skirt flexibility by means of vertical slotting cooperating with longitudinal slotting, and flexible webs in the region of the wrist pin bosses. He also follows Jardine's simplified design to permit economical manufacture and Jardine's boss relief. The Maynard piston, however, is not a slipper piston. While Jardine carried the webs nearly to the bottom of the skirt and omitted all of the skirt on the web faces, Maynard provided webs about two-thirds of the length of the skirt and continued the latter circumferentially below the webs except for a single vertical slot throughout one bearing face of the skirt. This structure increased the effect of heat on retarding the expansion of the piston so as to permit of a narrowed web. The upper part of the skirt, which reaches higher temperature, is provided with greater compensation against heat expansion by having its pe-

riphery interrupted by relief about the bosses. The lower part of the skirt requires no interruption of its periphery other than the vertical slot because it receives less heat. This results in a better bearing surface and means additional to the piston rings for closing the passage between the piston and the cylinder wall. It is clear that Maynard, while not departing from the teaching of Gulick in basic combination of elements, discloses a piston lighter and more economical of manufacture than Gulick and one more rugged and durable than Jardine. That the Maynard piston had a very great effect upon the industry and substantially advanced the art, there can be no doubt upon this record. In the precise form disclosed by Maynard and depicted in his drawings, many thousands were made and successfully used. In a somewhat modified form its production and use has run into very many millions.

Little is claimed for Mooers and Schmiedeknecht, and while some of the claims for each may possibly read on some of the accused structures, they have apparently no commercial history and have not substantially advanced the art. We do not pass upon them, and apprehend that the real controversy here is in respect to validity and infringement of Gulick and Maynard.

Of the devices charged to infringe, the one of prime importance to the plaintiff is undoubtedly the Sterling piston, exemplified by Exhibit 1. The defendants seek to avoid infringement by this structure, which with slight modification, follows the drawings and description of the Maynard patent, and without change, the commercial structure of the plaintiff's licensee, by the contention that its webs are rigid at the top and thus it is distinguished from Maynard, compensation for rigidity being achieved by reducing the thrust faces of the piston skirt at an angle to the verticle sides of the web, giving to the relief in the region of the bosses the so-called "keystone" configuration. But there are no limitations in the claims in suit as to the region of flexibility in the webs, and if the keystone relief provides greater flexibility at the union of the webs with the skirt, it is but a difference in degree, and not one of mode of operation or result and will not avoid infringement. In comparing commercial embodiments of invention with the drawings of patents it is not unusual to find that without departing from the teachings of the inventor improved operation may result from some modification of the disclosure. This court has indicated, *Gordon Form Lathe Co.* v. *Walcott Machine Co.*, 32 Fed. (2d) 55, 61, that superiority of operation, even when brought about by a valuable im-

provement which perhaps was patentable as such, will not of necessity negative infringement, citing *Schiedel Toy, etc., Co.* v. *Clark*, 217 Fed. 760, 771, *Toledo Machine & Tool Co.* v. *E. W. Bliss Co.*, 287 Fed. 443, 447. The Gordon and Melling patent there considered was in a true sense a pioneer patent and entitled to broad equivalents, but this does not mean that meritorious inventions which substantially advance the art are entitled to no reasonable range of equivalency. As was said in *Eibel Process* case, supra, at 63: "Eibel made a very useful discovery which has substantially advanced the art. His was not a pioneer patent creating a new art; but a patent which is only an improvement on an old machine may be very meritorious and entitled to liberal treatment. Indeed, when one notes the crude working of machines of famous pioneer inventions and discoveries, and compares them with the modern machines and processes exemplifying the principle of the pioneer discovery, one hesitates in the division of credit between the original inventor and the improver; and certainly finds no reason to withhold from the really meritorious improver, the application of the rule '*Ut res magis valeat quam pereat*' which has been sustained in so many cases in this court." A careful consideration of the patents to Gulick and Maynard, an analysis of the claims of each in suit, and a review of the evidence as to principles and modes of operation, lead us inevitably to the conclusion that the Sterling piston (Exhibit 1) infringes the claims in suit of both, and that such minor differences as appear in the commercial embodiment of Maynard, with which Exhibit 1 is identical, do not fall without the reasonable range of equivalents to which the inventors' contribution to the advancement of the art entitle them.

In the remaining accused devices we find no infringement. True, there is similarity. Here and there are identical elements, singly and in combination, but the complete combination upon the conception of which we found Gulick and Maynard to denote invention, does not in any others appear, and so it must be said here as in *Gear Grinding Machine Co.* v. *Studebaker Corporation*, supra, in reference to such situation: "It is the patentee's necessary dependence upon the co-operation of all the elements in one machine in order to make the claims valid that also makes this achievement possible."

We find claims 1, 11, 12, 13, 15, 18, 30, 33 of Gulick and Maynard patents in respect to all of the claims sued upon valid. We find such claims to be infringed by the Sterling piston exemplified by Exhibit 1. The decrees below are set aside and the causes remanded for the entry of

decrees granting the usual relief of injunction and accounting in respect to such infringement as has been found and dismissing the bills with respect to the alleged infringements of Jardine, Mooers and Schmiedeknecht, without prejudice. Costs of appeal will be borne by the defendants.

Syllabus.

SCHRIBER-SCHROTH CO *v.* CLEVELAND TRUST CO. ET AL.*

CERTIORARI TO THE CIRCUIT COURT OF APPEALS FOR THE SIXTH CIRCUIT.

No. 3. Argued October 18, 19, 1938.—Decided November 7, 1938.

1. Where it is improbable, notwithstanding the doubtful validity of a patent, that conflict of decision respecting its validity will arise in different circuits, because of the concentration in one circuit of the industry in which the patented devices are used, there is reason for granting certiorari to review a decision in that circuit sustaining it. P. 50.

2. A patent does not extend beyond the invention described and explained as the statute requires; it can not be enlarged by claims in the patent not supported by the description. P. 57.

3. The application for a patent cannot be broadened by amendment so as to embrace an invention not described in the application as filed, at least when adverse rights have intervened. *Powers-Kennedy Co.* v. *Concrete Co.*, 282 U. S. 175; *Permutit Co.* v. *Graver Corporation*, 284 U. S. 52. *Id.*

4. Amendments to Patent No. 1,815,733, to Gulick, for a combination in the structure of pistons of internal combustion engines for automobiles, designed to prevent undue thermal expansion of the pistons when in operation, were unlawfully added. P. 51.

5. In this combination, the head and skirt of the piston, separated by an air space, are connected and held in proper relation to each other by two webs which extend longitudinally within the skirt and which, pierced at right angles for wrist-pin bearings, support the piston pin bosses. The skirt is longitudinally split in order to minimize the effects of thermal expansion. The Circuit Court of Appeals regarded lateral flexibility of the webs as an essential element of the invention. The original application, however, contained no reference in terms to laterally flexible webs or to the function of the webs in securing flexibility of the skirt, but described the webs as "extremely rigid" and stated that an object of the invention was "to rigidly support the piston pin bosses from

*Together with No. 4, *Aberdeen Motor Supply Co.* v. *Cleveland Trust Co. et al.*, and No. 5, *F. H. Rowe Sales Co.* v. *Cleveland Trust Co. et al.*, also on writs of certiorari to the Circuit Court of Appeals for the Sixth Circuit.

the piston walls," and that the arrangement provided "a particularly strong support for the bosses." The webs, as shown by the drawings, conformed to these specifications, and neither drawings nor specifications gave dimensions showing thickness or other proportions of the webs which might suggest a flexible structure.

Held:

(1) That, after a similar piston with the element of flexible webs had come into commercial use and another had been described in an appliaction for patent, the patentee could not add that element to his application by amendment. P. 55.

(2) Amendments to that end could not be supported as being but clarifications of the application as filed. P. 57.

The contention that lateral flexibility was implied in the original description as an inherent property of the metal composing the web, and was disclosed by the drawings, is rejected.

Inherent flexibility of the web in coöperation with the slit skirt can not be depended upon to produce the desired effect in rendering the skirt yieldable in response to cylinder wall pressure. That depends upon design of the web, with correct proportioning of the different parts as to location and thickness to produce lateral flexibility. Inherent rigidity, made more effective by design of the webs, would correspondingly curtail the desired effect.

6. Decisions of the Court of Appeals for the District of Columbia and the Court of Customs and Patent Appeals sustaining the Gulick amendments are accorded weight but are not controlling in this Court when the validity of the amendments is involved in an infringement case. P. 59.

7. As flexible webs are neither described in the specifications nor mentioned in the claims of the patent for a like combination to Maynard, No. 1,655,968, they can be imported into them only by reference to the drawings or by inference from the inherent flexibility of the structure, which, as in the case of Gulick, are insufficient to accomplish the result. P. 60.

92 F. 2d 330, reversed.

CERTIORARI, 304 U. S. 587, to review the reversal of a decree holding certain patent claims invalid in suits for infringement. Other patents, held invalid by the District Court, but not passed upon by the court below, were not involved in this review.

Messrs. Thomas G. Haight and *John H. Bruninga*, with whom *Mr. John H. Sutherland* was on the brief, for petitioners.

Messrs. Arthur C. Denison and *F. O. Richey*, with whom *Mr. Wm. C. McCoy* was on the brief, for respondents.

MR. JUSTICE STONE delivered the opinion of the Court.*

The principal question for decision is whether the court below rightly sustained the validity of two patents by including in the combination constituting the alleged invention of each an element which was not in terms described in one, and the description of which in the other was added only by amendment to the application after it was filed.

Respondent, the Cleveland Trust Company, is the assignee in trust of some eighty patents relating to pistons of the type employed in internal combustion engines for automobiles, under a pooling agreement to which an automobile manufacturer and a number of manufacturers of pistons are parties. It brought the present suits in the District Court for Northern Ohio to enjoin infringement of five of the assigned patents. The case was tried before a special master who, upon the basis of elaborate findings, held that the Gulick patent, No. 1,815,733, applied for November 30, 1917 and allowed July 31, 1931, was invalid for want of invention and because of the addition to the application by amendment in 1922 of a new element of the alleged invention. In reaching this conclusion he relied on this Court's decisions in *Powers-Kennedy Corp.* v. *Concrete Co.*, 282

*Opinion reported as amended by Order of December 12, 1938, *post*, p. 573.

U. S. 175 and *Permutit Co.* v. *Graver Corporation*, 284 U. S. 52, as inconsistent with the result of interference proceedings in which Gulick's amendments were sustained, *Long* v. *Gulick*, 17 F. 2d 686, *Hartog* v. *Long*, 47 F. 2d 369. The master also held that the Maynard patent No. 1,655,968, applied for January 3, 1921 and allowed January 10, 1928, was invalid for want of invention and for failure to describe and claim the alleged invention. He held invalid upon various grounds the other patents, which are not presently involved.

The District Court adopted the findings and conclusions of the master and gave its decree for petitioners. The Court of Appeals for the Sixth Circuit reversed, as to the Gulick and Maynard patents only, holding that they were valid and infringed. 92 F. 2d 330.[1] As the court regarded the claims which it sustained as basic and thought that a full recovery could be had by respondent under them, it did not pass upon the validity of the other patents or decide other questions involved in the appeal.

Petition for certiorari raising the question, among others, whether the Court of Appeals had erred in holding patentable a combination including one element not described in the original application for the Gulick patent and later added to it by amendment, and not described at all in the Maynard patent, was at first denied, there being no conflict of decision. 303 U. S. 639. We later granted certiorari, 304 U. S. 587, on a petition for rehearing showing that, notwithstanding the doubtful validity of the patents, litigation elsewhere with a resulting conflict of decision was improbable because of the concentration of the automobile industry in the sixth circuit. Cf. *Paramount Publix Corp.* v. *American Tri-Ergon Corp.*, 294 U. S. 464; *Altoona Publix Theatres* v. *American Tri-Ergon Corp.*, 294 U. S. 477.

[1] The decree sustained Gulick's claims numbered 1, 11, 12, 13, 15, 18, 30 and 33, and Maynard's claims numbered 1, 6 and 8.

It is important for the proper functioning of the piston in a gas engine that it should fit the explosion chamber closely so as to conserve power, prevent the passage of lubricating oil around the piston into the chamber, and insure the smooth and noiseless movement of the piston within the cylinder. In designing gas engines for automobiles and other purposes requiring a high speed piston reciprocation with the accompanying development of high temperature in the explosion chamber, it is desirable to avoid thermal expension of the close fitting piston, which will result in loss of power and possible injury to the mechanism through increased friction, which may cause the piston to seize or stick. The danger of undue expansion is increased when, as is advantageous in automobile engines, the piston is of aluminum, which has a higher coefficient of expansion than the iron or steel chamber within which the piston moves.

Both the Gulick and Maynard patents are for combinations in the structure of a piston for gas engines designed to prevent or restrict undue expansion of the piston when in operation. The Gulick patent exhibits a piston in which the ring-carrying head is separated by an air space at is periphery from the cylindrically shaped skirt or guide wall, whose surface engages the inner surface of the cylinder. The piston head and skirt are connected by two "webs" or walls extending longitudinally through the interior of the skirt. The webs are pierced at right angles for wrist pin bearings, and support, at the bearings, piston pin bosses formed with integral flanges extending laterally from their respective bosses to form the webs, which in turn are integrally connected on either side with the interior wall of the lower part of the skirt and at their ends with the piston head. The skirt is longitudinally split on one side at a point in its circumference approximately midway between the pin bosses, with the edges of the skirt formed by the split separated so as

to admit of the free movement of the edges toward each other.

The structure is thus designed to minimize the expansion resulting from high temperatures developed in the chamber and to avoid the effects of thermal expansion of the skirt. The webs, which afford at the wrist pin bearings the means for connecting the piston-rod with the piston, serve to hold the head and skirt in proper relation to each other so that the air space between them retards flow of heat from the head to the skirt, undue expansion of the skirt, and the consequent increase of friction between piston and enveloping cylinder. Undue expansion of the piston is said by the patent's specifications to be avoided by the separation of the skirt by the longitudinal split in order to admit of unrestrained movement of the edges of the skirt toward each other. Elsewhere they state that "when the longitudinal split is used, as shown, the web structure has sufficient lateral flexibility to permit the split to close more or less under the action of the expansion forces incident to the heating of the piston."

The elements of the combination as enumerated in Claim 39 are: "A piston for an engine cylinder comprising a skirt, a head separated from the skirt wall around its entire periphery, said skirt being longitudinally split to render the skirt wall yieldable on every diameter in response to cylinder wall pressure, wrist pin bosses, and means rigidly connecting said bosses to the head and yieldingly connecting said bosses to the skirt whereby said skirt is yieldable in response to cylinder wall pressure." Reference to a combination including with other elements, web connections, "whereby said piston skirt is rendered yieldable during operation in response to cylinder wall pressure," appears in Claim 18.

The combination of piston head separated from a slitted skirt by an air space, the two being connected by

webs supporting wrist pin bearings with bosses which do not come directly in contact with the walls of the skirt, was plainly foreshadowed by the prior art as a practicable means of minimizing the flow of heat from head to skirt and of securing lateral flexibility in the skirt. The expired Spillman and Mooers patent No. 1,092,870, of April 14, 1914, pooled with the patents in suit, showed a piston with head separated by an air space from the skirt, the two being connected by a web separated from the skirt except at the point of integral connection with it at the lower end of the piston, and providing bearings for a wrist pin connection with bosses not in direct contact with the wall of the skirt.

Flexibility of the skirt attained by longitudinal slits was old, as shown by the Ebbs patent No. 700,309 of 1902, and Van Bever, No. 1,031,212 of 1912. The Franquist piston, patent No. 1,153,902 of 1915, another of the pooled patents, which showed piston head partially separated from skirt by air spaces, attained flexibility of the piston wall by longitudinal grooves in the skirt which interrupted its outer periphery though connected at the inner edges of the groove by a fold of the metal on the accordion principle. The Long piston, patent No. 1,872,772 of 1932, which the master and the district court found was in commercial use from 1917 on, and before the amendment of the Gulick application, presently to be discussed, showed longitudinal slits cut through the skirt, which was separated by air spaces from the piston head, the two being connected by parallel webs pierced for wrist pin bearings.

The court below found invention in the Gulick disclosure in a combination of elements, of which one was webs "laterally flexible," which were not specifically so described in the Gulick application until the amendment of 1922. Conceding that the deceleration of the flow of heat from head to skirt by an air gap might be an obvious

expedient of the art, and that to slit the skirt vertically so as to compensate for thermal expansion might not be beyond the skill of the art, the court added: "But to combine insulation of head from skirt, retraction of the bosses from the skirt periphery, connection of such bosses to the skirt with webs laterally flexible and yet so carried from the head as to support the load upon the wrist pin with sufficient strength and rigidity, and to utilize the mechanical force of the cylinder wall upon the skirt and the thermal expansion of the bosses so as to compensate evenly and fully for head expansion and to secure a balanced flexibility of the skirt with no bending concentration at any point therein, discloses, we think, a meritorious concept beyond the reach of those skilled in the art." 92 F. 2d, at 334.

We can find no support in the opinion for the contention of respondent that the Circuit Court of Appeals did not consider the flexible web an essential element in Gulick's invention. Its enumeration, among other named elements, of the connection of head and skirt by webs laterally flexible as embodying a meritorious concept must be taken to indicate that the court regarded the flexible webs as a part of the invention, the more so since it indicates that lateral flexibility of the webs is the only feature mentioned not within the prior art or within the expected skill of the art. It rejected, on the authority of *Long* v. *Gulick, supra,* and *Hartog* v. *Long, supra,* the contention made below and pressed here that Gulick's application as filed did not disclose "webs laterally flexible" and the resultant "balanced flexibility of the skirt," and that those features were added to specifications and claims after the use of the Long piston and after they had appeared in Hartog.

The Gulick application, which was filed November 30, 1917, contained no reference in terms to laterally flexible webs or to the function of the webs in securing flexibility

of the skirt. The specifications pointed to no inadequacy in the structure or function of webs of the prior art which would be remedied by the webs specified and to no function to be performed by them other than as a means of connecting and holding head and skirt so as to maintain the air gap between them and to support the wrist pin bearings and their bosses as both were shown in Spillman and Mooers. On the contrary, Gulick's application described the webs as "extremely rigid" and stated that an object of the invention was "to rigidly support the piston pin bosses of a piston from the piston walls." The only description of the web structure was as follows:

"It will be seen that in addition to providing a piston with a split skirt the above described construction also provides an extremely rigid connection between the piston pin bosses and the skirt of the piston, which construction may be used either with or without the split skirt and separated head. The arrangement of the supporting flanges 17 between the ends of the piston pin bosses and the connection of those flanges with the piston skirt provide a particularly strong support for the bosses."

The webs as shown by the drawings conform to the specifications of an "extremely rigid connection" between piston pin bosses and skirt and "a particularly strong support for the bosses." They form chords subtending the arc of the circle of the skirt, with flanges depending from the head to the bosses at right angles to the webs, and the skirt as shown is provided with interior corrugations and with an inturned flange at the bottom, all familiar devices for securing rigidity of structure. Neither drawings nor specifications give dimensions showing thickness or other proportions which might suggest a flexible structure.

In 1922, after the Long piston, whose webs concededly were laterally flexible, was in commercial use, and Hartog, to the knowledge of Gulick's assignee, had specified and

claimed a yieldable web, Gulick copied the Hartog claim and amended his specification so as to state that one of the objects of his invention was "to rigidly support the piston pin bosses of a piston from the piston wall against mechanical load thrust from the connecting rod without interfering with the yielding characteristics of the skirt in response to cylinder wall pressure." And he amended his description of the web structure to read:

"The arrangement of the supporting flanges 17 between the ends of the piston pin bosses and the connections of those flanges with both the piston guide portion and the head provide a particularly strong construction, and at the same time, when the longitudinal split is used, as shown, the web structure has sufficient lateral flexibility to permit the split to close more or less under the action of the expansion forces incident to the heating of the piston."

Petitioners insist that the flexible web element of the Gulick combination, as found and sustained by the court below, is excluded from the Gulick patent by reason of his failure to describe that element in his application as filed, and that he could not cure the omission and secure a patent embodying that feature by substituting by way of amendment "webs laterally flexible" for "extremely rigid webs" in the description of his invention. The statute, R. S. § 4888, provides that the application which the inventor must file as a prerequisite to a patent shall contain "a written description of [his invention] . . . and of the manner and process of making, constructing . . . and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art . . . to . . . construct . . . and use the same; and in case of a machine, he shall explain the principle thereof, and the best mode in which he has contemplated applying that principle, so as to distinguish it from other inventions; . . ."

The object of the statute is to require the patentee to describe his invention so that others may construct and use it after the expiration of the patent and "to inform the public during the life of the patent of the limits of the monopoly asserted, so that it may be known which features may be safely used or manufactured without a license and which may not." *Permutit Co.* v. *Graver Corporation,* 284 U. S. 52, 60. It follows that the patent monopoly does not extend beyond the invention described and explained as the statute requires, *Permutit Co.* v. *Graver Corporation, supra,* at 57; that it cannot be enlarged by claims in the patent not supported by the decription, *Snow* v. *Lake Shore & M. S. Ry. Co.,* 121 U. S. 617; cf. *Smith* v. *Snow,* 294 U. S. 1; and that the application for a patent cannot be broadened by amendment so as to embrace an invention not described in the application as filed, at least when adverse rights of the public have intervened. *Railway Co.* v. *Sayles,* 97 U. S. 554, 563, 564; *Powers-Kennedy Corp.* v. *Concrete Co.,* 282 U. S. 175, 185-186; cf. *Webster Electric Co.* v. *Splitdorf Electrical Co.,* 264 U. S. 463; *Permutit Co.* v. *Graver Corporation, supra; Crown Cork & Seal Co.* v. *Gutmann Co.,* 304 U. S. 159.

Respondent earnestly argues, as both courts held in the interference proceedings, *Long* v. *Gulick, supra,* and *Hartog* v. *Long, supra* that the changes in Gulick's application were not alterations in the description of his invention but were at most a permissible clarification of its description of the flexible web element which was present, or at least plainly suggested, in the specifications and drawings of the Gulick application. Flexibility, it is said, as is well known to those skilled in the art, is an inherent property of the metal out of which the webs are made, and in consequence reference to the webs in the application as filed was sufficient to import into it as a part of the description of the invention their known quality of

flexibility, a description which was made more specific, but not altered, by the amendments. The argument suggests that it was but the skill of the art, and not invention, to substitute a flexible for a rigid means of connecting head and skirt in a known combination of piston head separated from a slitted skirt by an air space and connected by webs. But in any case we think it falls short of establishing that the Gulick amendments were not new matter beyond the scope of the device described in the application as filed.

The properties of any given material are many and diverse. The antithetical qualities of rigidity and flexibility of a structure are not absolute but relative; it may be more rigid than some and more flexible than others; too rigid for some purposes and too flexible for others. The one quality may be increased and the other diminished by choice of materials from which the structure is made and by variation in its proportions. If invention depends on emphasis of one quality over the other, as the court below found was the case with the laterally flexible webs in the Gulick device, the statute requires that emphasis to be revealed to the members of the public, who are entitled to know what invention is claimed. That is not accomplished either by naming a member having inherent antithetical properties or by ascribing to it one property when the other is meant. Since rigidity is a relative term, the characterization of the structure as rigid must be taken as emphasizing rigidity rather than its opposite, flexibility, with special reference to the conditions to be encountered in the operation of the piston. Even if those skilled in the art would have known that a piston with webs which would yield enough laterally to accommodate the constriction of the split skirt under the pressure developed by thermal expansion would work most effectively if the webs were laterally flexible rather than

rigid, that was not the invention which Gulick described by his references to an extremely rigid web.

Gulick also failed to explain the principle of his machine so as to distinguish it from the prior art. Webs having the inherent properties both of rigidity and flexibility were familiar elements in piston structure. The court below, after pointing out that the slots of the Franquist skirt rendered it capable of limited constriction, found a distinguishing feature of Gulick's piston to be a web relatively flexible laterally, so as to accommodate the constriction of skirt to thermal expansion, the combination operating to secure a "balanced flexibility" of the skirt. But that principle—facilitating skirt constriction rather than obstructing it—was first explained and its embodiment in the flexible-webbed device was first claimed by the amendments to the application.

As already indicated, the omission from the specifications was not supplied by the drawings, which failed to disclose by dimensions the proportions of the webs. Inherent flexibility of the web in coöperation with the slit skirt cannot be depended upon to produce the desired effect in rendering the skirt yieldable in response to cylinder wall pressure. As respondent's own expert testified, that depends upon design of the web, with correct proportioning of the different parts as to location and thickness to produce lateral flexibility. Inherent rigidity, made more effective by design of the webs, would correspondingly curtail the desired effect.

We recognize the weight to be attached to the determinations in the interference proceedings in which the Court of Appeals of the District of Columbia and the Court of Customs and Patent Appeals sustained the Gulick amendments. Cf. *Radio Corporation* v. *Radio Laboratories*, 293 U. S. 1, 7. But the decisions in those cases are not controlling here. So far as the courts relied on

the inherent flexibility of the webs to supply the feature of lateral flexibility omitted from the Gulick description they ignored the principle recognized in *Permutit Co.* v. *Graver Corporation, supra,* and *Powers-Kennedy Corp.* v. *Concrete Co., supra.* So far as they relied on the drawings to supply the omission they disregarded the fact shown both by inspection and by the evidence presented here that the drawings do no more to point to Gulick's invention than does the fact of inherent flexibility. We conclude that respondent can take no benefit from the flexible web element added by amendment to the Gulick application.

In sustaining the claims of the Maynard patent the court below said that "Maynard . . . embodies the Gulick combination of skirt insulation, skirt flexibility by means of vertical slotting cooperating with longitudinal slotting, and flexible webs in the region of the wrist pin bosses. He also follows Jardine's simplified design to permit economical manufacture and Jardine's boss relief," and after enumerating certain mechanical features of the Maynard construction differing from Gulick and Jardine, concluded: "It is clear that Maynard, while not departing from the teaching of Gulick in basic combination of elements, discloses a piston lighter and more economical of manufacture than Gulick and one more rugged and durable than Jardine." 92 F. 2d, at 337.

Invention over Gulick and Jardine was apparently found in the details of construction but, as we are without other indication of the character of the invention, we construe the court's opinion as including the laterally flexible webs as an essential element in the patented combination. As flexible webs are neither described in Maynard's specifications nor mentioned in his claims, they can be imported into them only by reference to the drawings or by inference from the inherent flexibility of the structure, which, for reasons already given in our considera-

tion of the Gulick amendments, are insufficient to accomplish that result. We conclude that the court below erred in giving any effect to so much of the Gulick patent as by amendment describes or claims the flexible webs, and in treating any of the specifications or claims in Gulick and Maynard as referring to such webs. We assume that it sustained Claim 1 of the Gulick patent, which makes no mention of web flexibility, only by reading into it that element, which the court regarded as an essential part of the invention.

As the Court of Appeals did not pass upon other questions in the case, the causes will be reversed and remanded to it for further proceedings, in conformity with this opinion, with respect to such claims of the patents in suit as appellant below submitted to that court for adjudication.

Reversed.

MR. JUSTICE ROBERTS took no part in the consideration or decision of this case.

BLANK PAGE

SECOND DECISION OF THE COURT OF APPEALS,
108 FED. (2D) 109.

Nos. 7223-24-25, 8094-95-96

UNITED STATES CIRCUIT COURT OF APPEALS

SIXTH CIRCUIT

THE CLEVELAND TRUST COMPANY, CHRYSLER CORPORATION, *Appellants,*

No. 7223 v.

THE SCHRIBER-SCHROTH COMPANY, *Appellee.*

THE SCHRIBER-SCHROTH COMPANY, *Appellant,*

No. 8094 v.

THE CLEVELAND TRUST COMPANY, CHRYSLER CORPORATION, *Appellees.*

APPEALS from the District Court of the United States for the Northern District of Ohio, Eastern Division.

Decided October 6, 1939.

Before HICKS, SIMONS and ALLEN, Circuit Judges.

SIMONS, Circuit Judge. Our former opinion in this much litigated patent controversy involving automobile pistons is reported at 92 Fed. (2d) 330, under identical style, but including disposition of the companion cases brought by appellants against the Aberdeen Motor Supply Company, No. 7024, and the F. E. Rowe Sales Company, No. 7025. The Supreme Court, after denying certiorari and a petition for rehearing, received the cases upon a second rehearing petition and reversed with remand to us for consideration of questions presented and not determined, *Schriber-Schroth Co.* v. *Cleveland Trust*

Co., 305 U. S. 47; directions amended, 305 U. S. 573.[1] A second group of appeals (8094, 8095, 8096) from decrees against appellees in the first case, responsive to our decision therein, is now consolidated for consideration with the reconsideration required by the order of remand.

The claims of five patents, and a number of infringing devices, were in the first instance presented for adjudication. In their consideration we were greatly impressed by the story disclosed by the record of the long search and sustained effort on the part of exceptionally competent automotive engineers to completely solve the problem of a successful aluminum piston operating freely with minute clearances in an iron cylinder. There had been advances, "foreshadowing," perhaps, that solution would not always defy inventive genius, though on the whole the aluminum piston as heretofore noted had received a "black eye" in the industry. Much had been expected of a piston invented by one Jardine, and it was about to be put into commercial production when a design disclosed by Maynard, which seemed an improvement thereon, was produced by the appellants' licensee, was accepted by major companies in the industry, and went into use to the number of many millions. In analyzing the Maynard invention it appeared to us that however meritorious certain structural improvements might be, it nevertheless embodied the basic concept of the patent to Gulick owned by the appellant and in suit. We held certain claims of Gulick and Maynard to be valid and infringed without passing upon the intermediate disclosure of Jardine, though recognizing that Jardine may have made substantial contribution to the art.

Observing that many if not all of the elements of the Gulick combination were old, we held his precise combination to be novel and to have the quality of invention, and that its reproduction by the appellees in the specific form disclosed by Maynard was infringement of both. In a recital of the Gulick achievement in terms of elements, function and result, we assigned to the webs of Gulick the rigidity proclaimed by his specification in the dimension in which they furnished "a particularly strong support for the bosses," but a lateral flexibility in the dimension wherein rigidity appears not to have been required, where it would not serve the purpose an-

[1] The Supreme Court granted certiorari after twice denying it on the ground that conflict was improbable because of the concentration of the automobile industry in the Sixth Circuit. It might be interesting to explore the availability of the Declaratory Judgment Act to dealers in other circuits to raise conflict.

nounced, and where it would appear to interpose an obstacle to the expected functioning of a split skirt. There was assumption that since the specification was addressed to those skilled in the art, a purpose to provide a particularly strong support for the bosses was fully served by vertical rigidity, and made implicit in the original specification a lack of rigidity otherwise. With this view we found no difficulty in agreeing with the tribunals that sustained the Gulick amendment reciting lateral flexibility as mere clarification.

The Supreme Court, concluding that Gulick's failure to describe the flexible web element as a feature of his invention, and his failure in this respect to explain the principle of his machine so as to distinguish it from prior art, did not conform to R. S. Sec. 4888, held that his amendment added new matter beyond the scope of the device described in the application as filed, in consequence of which the appellant might take no benefit therefrom. Assuming that we sustained certain claims of his patent only by reading into them the flexible web element, it reversed our decision as to Gulick, and since Maynard neither claims nor describes flexible webs, it likewise reversed our decision as to its validity and infringement. Reciting, however, that since it had been thought by us that full recovery could be had by the appellants under the two patents adjudicated, we did not decide other questions involved in the appeals, it remanded the causes to us for further proceedings "with respect to such claims of the patents in suit as appellant below submitted to that court for adjudication." Upon petition for rehearing and clarification, it added to the direction for judgment the following: "On the remand the Court of Appeals will be free to consider whether the amendments to the Gulick application rendered void the patent issued upon it, and to consider all questions affecting the validity and infringement of the claims in suit of the Gulick and Maynard patents, but without including web flexibility or laterally flexible webs as an element in the combinations patented [illegible]."

Controversy has arisen over the scope of the remand, the appellee contending that we are precluded from consideration of the Schmiedeknecht and Mooers patents [illegible] dismissed as to them, albeit without [illegible] they may be brought to us for consid[illegible] new actions. The order of remand is, however [illegible], requiring no interpretation. We are directed to take further proceedings with respect to such claims of the patents in suit as appellants submitted

to us for adjudication, not merely in respect to those adjudicated. The phrasing of the amended direction is one of enlargement and clarification and not of limitation. That decrees have been entered below dismissing the bills as to the three patents not considered is of no moment. These decrees are brought into question in appeals 8094, 8095 and 8096 here involved. If they are in conflict with conclusions now reached they must be set aside and our mandates recalled, just as they must be set aside as in conflict with decision above. We hold that the remand operates to reopen the entire cause except insofar as questions necessary to decision have been decided by the Supreme Court and insofar as our own conclusions have not there been held erroneous and so constitute the law of the case.

The first question that confronts us is in respect to the validity of the claims of the Gulick and Maynard patents as circumscribed since we are now obliged to consider them without reading into them web flexibility or laterally flexible webs as an element, and in this connection it seems immaterial whether we read an element into them or merely construed an existing element as having in its environment a given characteristic. We recognized in our first opinion that Gulick was for a combination of elements, many if not all of which were old. Yet the combination appeared to us to be novel and to denote invention since a new result was secured in consequence of a nicely balanced flexibility of piston skirt, permitting successful operation at minute clearances without bending concentration at any point to impair ruggedness, and so distinguishing from Franquist and other pistons. In a case not free from doubt, since probably no one has seen an automobile piston reciprocating in its cylinder under operating conditions, the success of the commercial embodiment of Maynard, comprehending what was then conceived to be Gulick's basic concept, after so much failure, clearly appeared to denote that somewhere was invention. But the Gulick conception as we then considered it was of balanced flexibility derived from interplay of yielding skirt periphery and flexing supporting webs in response to the mechanical force of the cylinder wall and the thermal expansion of the piston head. The combination we are now obliged to consider is one with rigid webs opposing their rigidity to the resiliency of a skirt slotted to accommodate itself to forces to which practically it may not yield. This is not the combination we held to be valid. It is not the combination to which those most captious and skilled in the industry gave

tribute, to the end that all our doubt as to validity was resolved. We are constrained to hold all of the claims in suit of Gulick invalid as marking no inventive step over prior art. It therefore becomes unnecessary to consider whether his amendments voided his patent since the direction in this respect is but permissive and not imperative. It likewise becomes unnecessary to consider the effect of the disclaimer filed since decision above.

In Maynard there was no emphasis on rigidity of web construction such as was found by the Supreme Court in Gulick, but we are compelled nevertheless to view the Maynard combination as one failing to disclose cooperation of flexible webs with vertical and longitudinal slotting to secure the balanced flexibility conceived to reside in Gulick, and constituting therein a basic achievement, and since it is apparent that details of construction recited by us as disclosing a piston lighter and more economical of manufacture than Gulick and more rugged and durable than Jardine made no impression upon the court as marking inventive steps over prior art, we are likewise constrained to hold the claims of Maynard in suit invalid.

In the conviction that the long search for a solution of the alminum piston problem by engineers of great ability, their repeated failures, and the ultimate success of the Aluminum Company's commercial device point with persuasiveness to the fact that somewhere in the search one, with the spark of genius denied the skilled mechanic, contributed to the art the thought that brought achievement out of failure, we reconsider the Jardine patent, for though we are as sensitive as is the Court of Appeals of the Second Circuit [*Buono* v. *Yankee Maid Dress Corp.*, 77 Fed. (2d) 274, 276], to "the high standard demanded for invention by the decisions of the Supreme Court in recent years," attested by many of our more recent decisions, yet we also share Judge Learned Hand's understanding that the Supreme Court has not departed from the principle that recourse must be had in doubtful cases to the history of the art for the interpretation of claims and the existence of invention.

The patent to Jardine, 1,763,523, was issued June 10, 1930, upon an application originally filed March 11, 1920, prior to the filing of the Gulick amendment in 1922, now held to be invalid. Jardine with great clarity and in precise detail explains the principle of operation of his machine and the flexibility of its webs. The knowledge that was not Gulick's or was by him concealed, is clear to Jardine and by him proclaimed. "The webs 6 and

guide segments preferably are so designed that this displacement of the segment 10, 10^a, is permitted by virtue of a bending of the webs 6 at points remote from the guide segments. To this end, as shown in Fig. 4, the thickness of the guide segments is increased toward the webs 6 and the webs 6 are decreased in thickness from the guide portions inward toward the bosses to points in line with the inner ends of the slot 11^a. This gives in effect a cantilever structure weakest at its support. . . . Thus the reaction force of the cylinder wall on the outer faces of the guide segments as the piston expands tends to cause bending of the webs 6 along said line 13. Due to the bending of the web sections 6 and the forcing together of each pair of segments, the guide part of the piston may undergo a considerable thermal expansion without a corresponding increase in the outer diameter thereof and thus a small initial clearance can be used without danger of scoring or seizure of the piston."

Jardine is also the first to refer specifically to an "aluminum alloy piston," and he states that one embodying his invention "can be fitted to the engine cylinder with a very small clearance, and that compensation for the relatively large thermal expansion of the guide section of the piston is provided by the displacement of the guide segments which results from the reaction force of the cylinder wall on the outer faces of the guides." It is true that the drawings of Jardine depict what is known as the slipper type of piston, illustrated also in the patent to Ricardo, No. 1,294,833, but his invention is not limited to that type, for he says: "It is to be understood that the invention is essentially applicable to other forms of construction."

While the specimen claims of Jardine 1, 8 and 11, though reciting the web as an element do not incorporate therein the property of flexibility, yet in the light of the description they must be so interpreted, for it is clear that the Supreme Court in reversing our decision departs not at all from the rule that claims must be read in the light of the specification, since it is pointed out with particularity in respect to Gulick that his specifications point to no inadequacy in the structure or function of webs of the prior art which would be remedied by the webs specified, and to no function to be performed by them other than as a means of connecting and holding head and skirt so as to maintain the air gaps between them and to support the wrist pin bearings. Jardine repels this criticism of the Gulick application. It is also pointed out that Gulick failed to explain the principle of

his machine so as to distinguish it from the prior art. Jardine points to prior art failure. "I have found," he says, "that these difficulties can be overcome by constructing a piston with its skirt or guide portion supported and slotted or divided in a manner to permit deformation and deflection of parts thereof without interfering with the performance of the essential functions of the respective parts."

To invalidate Jardine the appellees rely mainly upon the Long piston and Long's patent No. 1,872,772, upon an application prior to Jardine's, and emphasis is placed upon the observation of the court to the effect that the Long piston, with webs concededly flexible laterally, was in commercial use in 1922. This brings us to a consideration of the contention, vigorously urged by the appellants, that the Supreme Court having applied to the sufficiency of disclosures made by Gulick and Maynard the so-called strict rule of construction, an equally strict rule must be applied to prior art. To this the appellees reply that there is a distinction between the teachings of a prior art patent or publication and a prior use. They concede that the description in patent or publication must be complete when read in connection with the prior art as one skilled in the art would read it, but urge that when it comes to a prior use, and an article is in existence so that it may be duplicated, it is immaterial whether those skilled in the art knew or were unaware of its characteristics.

Recognizing distinction between what may be disclosed in a patent and what may appear to the understanding of those skilled in the art when it reaches commercial embodiment and so may be physically reproduced, yet it would seem to us that nothing is prior art, at least in respect to function, unless its function is understood by those skilled in the art. Otherwise there would be little support in reason for the rule that novelty is not negatived by any prior accidental occurrence or production the character and function of which was not recognized until later than the date of the patented invention sought to be anticipated thereby, 1 Walker, 6th Ed. Sec. 106, or the further rule that novelty is not negatived by anything which was neither designed nor apparently adapted, nor actually used, to perform the function of the thing covered by the patent, Idem, Sec. 107. Nor is the observation of the court that a Long piston was in commercial use in 1922, the webs of which were concededly flexible, to be taken as a conclusion that the webs were flexible in use or that their flexibility, cooperating with other re-

silient elements, was then understood, however clear it may later have come to be. The Long patent did not disclose flexible webs. Since the argument that the webs of Gulick were laterally flexible to the understanding of those skilled in the art was rejected, so must we reject inference that prior to Jardine the art understood the webs of Long to be flexible in the absence of clearly convincing evidence that they were known to have that quality. Moreover, the Long patents recite that the separated portions of the skirt are rigidly held against bending to the forcing thrust of the piston. A Long piston was introduced to the industry by advertisement in *The Motor World,* December, 1921. It was installed in the Franklin automobile, and use at a clearance of .005 was set forth in a service bulletin. The evils following clearance so great are sufficiently recited in our former opinion, and the announced clearance negatives the thought either of web flexibility or of its understanding by the art.

It is said that pistons could not in an air cooled motor as was the Franklin, be machined to the minute clearance possible in water cooled motors. If true, it follows that Long contributed little to the solution of a problem whereby successful operation of an aluminum piston in an iron cylinder at clearances of .002 or less was achieved. It should, moreover, be noted that Long was a worker in the piston art for a considerable period. Three of his patents are in the record. It is conceded that No. 1,872,772 was his best effort, yet the structures urged to anticipate Jardine were devices prior to it, and while they may have had some commercial history, his latest patent still failed to describe or claim web flexibility.

Hartog, in his patent No. 1,842,022, prior to Jardine, claims internal yielding ribs, and means for yieldingly connecting skirt sections with the head. It seems clear from the Hartog description and drawings that his thought was of a springing resiliency in arcuate extensions of his skirt sections, and not of the bending or flexing of straight ribs so proportioned as to yield to the thermal expansion of the bosses on the cantilever principle, and that he did not disclose Jardine's mode of operation. There is little in the record to aid us to an understanding of Hartog. The experts did not discuss it, and the appellees appear to place no great reliance upon it. It is a mere paper patent without influence upon the art, and it is difficult, if not indeed impossible, to comprehend its mode of operation or whether it is operable at all, since he describes a piston skirt of greater diameter than the cylinder, mechanically compressible when

cold, to fit tightly therein. Hartog taught nothing to Jardine.

The specimen claims 1, 8 and 11 of the Jardine patent are valid. Since our conclusion in this respect is based upon the concept of a combination with balanced skirt flexibility due to cooperation of longitudinal and vertical slotting with flexing webs supporting retracted bosses and connected to a skirt thereby made responsive to physical compression and thermal expansion so as to permit of minute clearances between piston and cylinder, a concept perceived in Gulick as amended and minus amendment no longer perceived, and since this combination with modifications which may improve but do not destroy it appears in Jardine, and since it is the combination that appears in the commercial piston of the Aluminum Company of America[2] responding to Maynard's specific form and in such form reproduced by Sterling Products Co., in exhibit I, sold by the appellees, we hold that the latter infringes claims 1, 8 and 11 of Jardine. As we were unable in our first decision to find Gulick's complete concept, as we then understood it, in other accused structures, so are we now unable to find in them Jardine's concept, and we hold they do not infringe.

The Mooers patent 1,402,309 was not greatly stressed in the earlier briefs or argument. It is not strongly urged now. It is contended that Mooers disclosed the scheme for converting heat into mechanical energy and diverting expansion through this energy into relieved spaces limiting expansion in those unrelieved. But if this is the teaching of Mooers it must be derived from inferences not permitted to be drawn from Gulick and Maynard, and without such interpretive approach the conclusion must be that the Mooers disclosure is incomplete. We hold its specimen claims to be invalid.

Schmiedeknecht patent 1,256,265 has now expired. It discloses no web flexibility cooperating with other elements of resiliency to achieve the balanced flexibility perceived in Jardine on the basis of which alone the latter is thought to be valid, and we sense no advance in Schmiedeknecht that distinguishes it from the prior art in aspects beyond the skill of the art. It does not invalidate Jardine and is itself invalid.

Appeals 7223, 7224 and 7225, are from decrees in the same causes determined by our previous opinion, and

[2] We are no more concerned than was the master below with the character of the monopoly sought by the appellants' licensee. Monopoly is the essence of the inventor's reward, and an assignable property right. Its control, abridgment or destruction lies wholly within the legislative province.

responsive to our mandates therein. This unusual situation resulted from the denial of a petition for certiorari to our first judgment and denial of a petition for rehearing thereon. It was doubtless assumed below that the cases had reached finality. The decrees adjudicated certain claims of Gulick and Maynard valid and infringed by exhibit I, and granted the usual injunction and order for accounting. The issue as to them is now moot, and our mandates must be recalled and the decrees set aside.

The appellants, however, contend that the decrees should not have provided injunctive relief to the appellee Trust Company on the ground that it is the bare title holder of the patents in suit, with the Aluminum Company of America as exclusive licensee the only party entitled to seek it. They thereby deny our power to grant restraint in respect to claims now found valid and infringed. The master, however, concluded that the Trust Company holds the entire right, title and interest to all patents in suit except an undivided half of the Maynard patent, that it might sue in its own name without joining with it the beneficiaries under the trust, and that the Aluminum Company is a non-exclusive licensee and not a necessary party to the suit. No exception was taken to his findings or conclusions in this respect, and they were not challenged when the case was first before this court. The right of appellees to injunction was no longer in issue when we gave direction for mandate. It is now the law of the case that appellees are entitled to an injunction restraining infringements of any claims of any of the patents in suit now adjudicated as valid and infringed.

A second objection to the decrees, and so impliedly to similar substituted decrees, is that they were not specific. It is urged that they should have recited with particularity the exhibits held to infringe, and those held not to infringe. There is merit to the first phase of the contention since an injunctional order should be as explicit as the case permits. There is no virtue in the second, since decision carries its own vindication of unsuccessfully assailed structures and no affirmative relief by appellants was prayed.

The decrees below will be set aside upon the recall of the mandates. A new decree will be entered in each case adjudicating claims 1, 8 and 11 of Jardine patent valid and infringed by exhibit I. It will provide for an injunction restraining manufacture, use and sale of exhibit I, and all substantial equivalents thereof, and grant the

usual accounting for past infringement by exhibit I or its equivalents. It will deny relief as to every other claim of any of the patents in suit, and as against all other accused structures. Costs of the appeals will be divided.

Reversed and remanded for further proceedings in conformity herewith.

BLANK PAGE

FILE COPY

Office - Supreme Court, U. S.
FILED
OCT 9 1940
CHARLES ELMORE CROPLEY
CLERK

IN THE

SUPREME COURT OF THE UNITED STATES.

OCTOBER TERM, 1940.

No. 9.

THE SCHRIBER-SCHROTH COMPANY,
Petitioner,

vs.

THE CLEVELAND TRUST COMPANY,
CHRYSLER CORPORATION,
Respondents.

No. 10.

THE ABERDEEN MOTOR SUPPLY COMPANY,
Petitioner,

vs.

THE CLEVELAND TRUST COMPANY,
CHRYSLER CORPORATION,
Respondents.

No. 11.

THE F. E. ROWE SALES CO.,
Petitioner,

vs.

THE CLEVELAND TRUST COMPANY,
CHRYSLER CORPORATION,
Respondents.

PETITIONERS' REPLY BRIEF MAKING REFERENCE TO ADDITIONAL RECORD PAGES.

JOHN H. BRUNINGA,
JOHN H. SUTHERLAND,
Attorneys for Petitioners.

October 7, 1940.

St. Louis Law Printing Co., 415 North Eighth Street. CEntral 4477.

BLANK PAGE

IN THE

SUPREME COURT OF THE UNITED STATES.

OCTOBER TERM, 1940.

No. 9.

THE SCHRIBER-SCHROTH COMPANY,

Petitioner,

vs.

THE CLEVELAND TRUST COMPANY,
CHRYSLER CORPORATION,

Respondents.

No. 10.

THE ABERDEEN MOTOR SUPPLY COMPANY,

Petitioner,

vs.

THE CLEVELAND TRUST COMPANY,
CHRYSLER CORPORATION,

Respondents.

No. 11.

THE F. E. ROWE SALES CO.,

Petitioner,

vs.

THE CLEVELAND TRUST COMPANY,
CHRYSLER CORPORATION,

Respondents.

PETITIONERS' REPLY BRIEF MAKING REFERENCE TO ADDITIONAL RECORD PAGES.

This Reply Brief, filed pursuant to the Stipulation dated June 19, 1940, is filed for the purpose of designating the pages of the Record to which Petitioners may refer in a further Reply Brief to be filed before the hearing, or to

which Respondents may refer at the hearing; and is filed at this time so as to permit the Clerk to proceed with the printing of a condensed and reduced record.

1. Respondents' Brief asserts that the accused piston, Exhibit 1, has a structure and mode of operation to secure a definite result. Petitioners may refer to the following additional citations to the Record:

124, 125-6, 127, 128-9, 223, 261-262, 529-30, 582, 586-7, 1026-7, 1031, 1036-8, 1049, 1056-7.

2. Respondents' Brief asserts that the piston of the Jardine patent has a structure and mode of operation to secure a definite result. Petitioners may refer to the following additional citations to the Record:

72, 73-76, 95, 136-7, 138-140, 141-144, 157-8, 169-73, 173-5, 192, 196-7, 199-200, 229-231, 232, 244-5, 551-2, 1026-7.

3. Respondents' Brief asserts that the piston of the Jardine patent went into extensive commercial use. Petitioners may refer to the following additional citations to the Record:

131-2, 181, 190, 224-5, 225-6.

4. Respondents' Brief challenges the proof with respect to the existence, utility, structure and mode of operation of the Long pistons, so that it becomes necessary to include the evidence anent the same in toto; and Petitioners may refer to the following additional citations to the Record:

343-471, 490-92, 537, 557-8, 567-8, 651-699, 927-9, 937-41, 985-7, 994-8, 1440-1446, 1585-1646, 1667-69, 1727-38.

5. Respondents' Brief challenges the utility of and the srtucture and mode of operation of the Franquist, Schmiedeknecht, Ricardo, Gulick, Hartog, and Pomeroy pistons. Petitioners may refer to the following additional citations to the Record:

145-6, 203-4, 221-2, 226-7, 263, 496, 506-7, 529, 545, 573-4, 1363-4.

6. Corrections: Record Page 2208, referred to at page 7, Petitioners' main Brief, should be 2108. Record Page 178, referred to in Petitioners' main Brief, page 27, should be Record Page 190.

Respectfully submitted,

JOHN H. BRUNINGA
JOHN H. SUTHERLAND,
Attorneys for Petitioners.

October 7, 1940.

BLANK PAGE

FILE COPY

Office - Supreme Court, U. S.
FILED
OCT 18
CHARLES ELMORE CROPLEY
CLERK

SUPREME COURT OF THE UNITED STATES

OCTOBER TERM, 1940

No. 9

THE SCHRIBER-SCHROTH COMPANY,
Petitioner,

vs.

THE CLEVELAND TRUST COMPANY, CHRYSLER CORPORATION,
Respondents.

No. 10

THE ABERDEEN MOTOR SUPPLY COMPANY,
Petitioner,

vs.

THE CLEVELAND TRUST COMPANY, CHRYSLER CORPORATION.

No. 11

THE F. E. ROWE SALES COMPANY,
Petitioner,

vs.

THE CLEVELAND TRUST COMPANY, CHRYSLER CORPORATION.

ON WRITS OF CERTIORARI TO THE UNITED STATES CIRCUIT COURT OF APPEALS FOR THE SIXTH CIRCUIT.

APPLICATION FOR WRIT OF CERTIORARI TO CORRECT DIMINUTION OF RECORD.

JOHN H. BRUNINGA,
JOHN H. SUTHERLAND,
Counsel for Petitioners.

BLANK PAGE

SUPREME COURT OF THE UNITED STATES

OCTOBER TERM, 1940

No. 9

THE SCHRIBER-SCHROTH COMPANY,
Petitioner,

vs.

THE CLEVELAND TRUST COMPANY, CHRYSLER CORPORATION,
Respondents.

No. 10

THE ABERDEEN MOTOR SUPPLY COMPANY,
Petitioner,

vs.

THE CLEVELAND TRUST COMPANY, CHRYSLER CORPORATION,
Respondents.

No. 11

THE F. E. ROWE SALES COMPANY,
Petitioner,

vs.

THE CLEVELAND TRUST COMPANY, CHRYSLER CORPORATION,
Respondents.

APPLICATION FOR WRIT OF CERTIORARI TO CORRECT DIMINUTION OF RECORD.

Now come petitioners in the above entitled causes, and show:

1. That during the taking of the deposition of Louis M. Stellman (R. 455) there was produced a blue print of a drawing of the H. H. Franklin Manufacturing Company

numbered P-3984, which was there marked for identification as Defendants' Exhibit BB.

2. That during the taking of the testimony of Stephen R. Castor in behalf of Plaintiffs-Respondents at Record Page 670, the witness Castor produced a blue print of the same drawing, to-wit Number P-3984; which was there offered in evidence as Defendants' Exhibit BB-1.

3. That a copy of said drawing, duly certified, by the Clerk of the District Court is annexed hereto.

4. That said drawing, P-3984, does not appear in the record as certified from the court below, either as Exhibit BB, or as Exhibit BB-1, or otherwise; and that the omission of the same arose through inadvertence, accident and mistake, and under the following conditions:

On or about November 27, 1934, principal counsel for petitioners in St. Louis, Missouri, received from principal counsel for respondents a proposed praecipe, setting forth the items in the record to be included in the transcript furnished the Court of Appeals; such proposed praecipe did not include Exhibit BB or Exhibit BB-1; on December 10, 1934, principal counsel for petitioners advised principal counsel for respondents that they would insist upon inclusion of certain of defendants' exhibits, including Exhibit BB, in the printed record; in a letter dated February 25, 1935, principal counsel for respondents advised principal counsel for petitioners, *inter alia*, that:

> "We are also including the many Defendant's exhibits that you desire to have included in the Praecipe."

Thereafter, certain adjustments were made in the praecipe, with the view of shortening the record, as by stipulating digests of certain matters; but principal counsel for petitioners assumed that the said Exhibit BB would be

included in the printed record, until after receipt of the printed record counsel found that the same was not included. While the praecipe finally filed by respondents did not include either Exhibit BB or Exhibit BB-1, this fact was overlooked by counsel for petitioners, who relied upon counsel for respondents' statement, as set forth above, that defendants' requested exhibits had been included.

5. That printing of the record for this Court has not been proceeded with.

WHEREFORE IT IS PRAYED that writ of certiorari issue to the United States District Court for the Northern District of Ohio, requiring the clerk of said court to certify to this Court a copy of said drawing numbered P-3984, either as Exhibit BB or as Exhibit BB-1; or, in the alternative, that the certified copy of said drawing, as filed herewith, be reproduced as a part of the printed record in these causes.

THE SCHRIBER-SCHROTH COMPANY,
THE ABERDEEN MOTOR SUPPLY COMPANY,
THE F. E. ROWE SALES CO.,
Petitioners.

JOHN H. BRUNINGA,
By JOHN H. SUTHERLAND,
Attorneys,
St. Louis, Missouri.

October 8, 1940.

STATE OF OHIO,
County of Cuyahoga, ss:

John H. Sutherland, being duly sworn, deposes and says that he is of counsel for petitioners in the above-entitled causes; that he is familiar with the facts stated in the foregoing Application for Writ of Certiorari to Correct Diminu-

tion of Record; and that the same are true to the best of his knowledge, information or belief.

JOHN H. SUTHERLAND.

Sworn to and subscribed before me this 8th day of October, 1940.

GARNET L. SHEETS,
Notary Public.

[SEAL.]

My commission expires Nov. 29, 1942.

Service of following acknowledged this 8th day of October, 1940.

WM. C. McCOY,
Attorney for Respondents.

(Here follows 1 photolithograph)

BLANK PAGE

11895
11905

.3226
.3223

.2932
.2942

.35 DRILL (110) 6 HOLES

.750
.7495

1.6130
1.6300

.3692.5
.3690.5

3 1/16

.3248
.3246

THIS BOSS ON DIE CAST PISTONS ONLY FOR MACHINING PURPOSES

POLISH TOP

SAW to WIDE

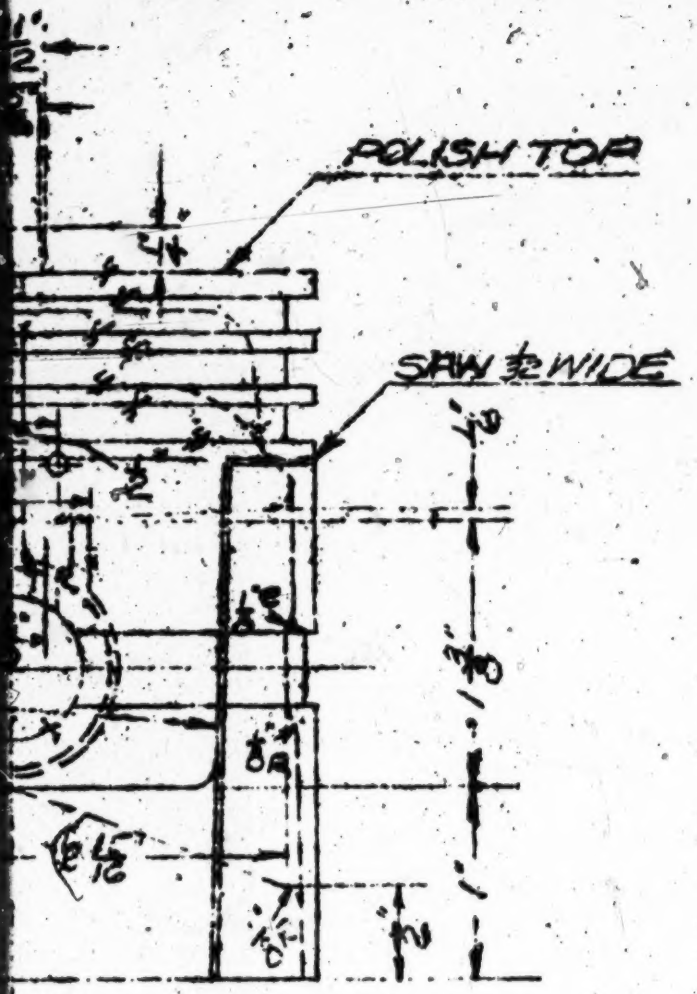
THE SURFACE BOUNDED BY THESE LINES ON BOTH SIDES OF PISTON TO BE .005 BELOW REST OF SKIRT

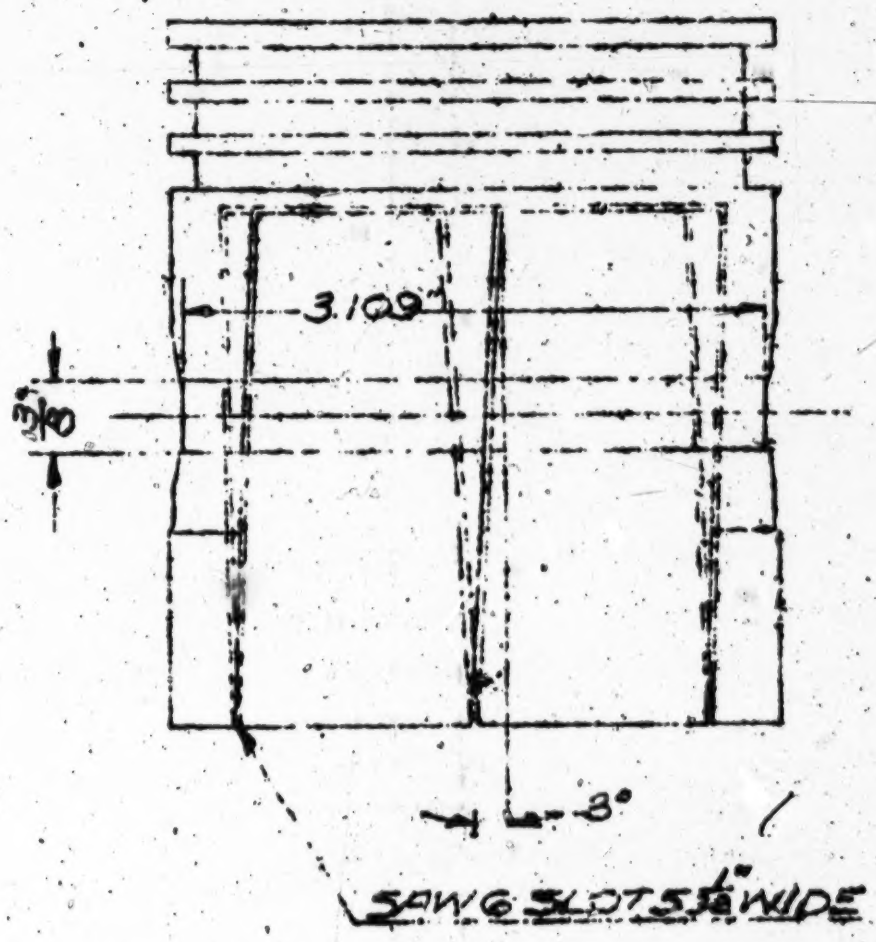
50°

50°

ALL PISTONS ON SAME MOTOR MUST BE SAME WEIGHT

BEFORE MACHINING THE DIE CAST PISTONS THE CASTIN SHALL BE HEATED TO 600°F FOR 80MIN AND ALLOWED TO COOL SLOWLY IN THE A.B.





MOTOR MUST BE SAME WEIGHT

E DIE CAST PISTONS THE CASTING
F FOR ROMIN AND ALLOWED
A.E.

H H FRANKLIN MANUFACTURING CO.
SYRACUSE, NEW YORK

NAME	PISTON
	DATE May 8-19
	P-3084

BLANK PAGE

DISTRICT COURT OF THE UNITED STATES, NORTHERN DISTRICT OF OHIO, EASTERN DIVISION.

UNITED STATES DISTRICT COURT,
Northern District of Ohio, ss:

I, C. B. Watkins, Clerk of the District Court of the United States within and for said District, do hereby certify the foregoing to be a true copy of the Defendants' Exhibit BB filed in the above-entitled cause in said court, and that the same is correctly copied from the original now in my official custody and on file in my office.

Witness, my official signature and the seal of said court at Cleveland, in said District, this 8th day of October, A. D. 1940.

C. B. WATKINS,
Clerk,

By M. FLOETER,
Deputy Clerk.

[SEAL.]

BLANK PAGE

FILE COPY

IN THE

SUPREME COURT OF THE UNITED STATES.

OCTOBER TERM, 1940.

No. 9.

THE SCHRIBER-SCHROTH COMPANY,
Petitioner,

vs.

THE CLEVELAND TRUST COMPANY,
CHRYSLER CORPORATION,
Respondents.

No. 10.

THE ABERDEEN MOTOR SUPPLY COMPANY,
Petitioner,

vs.

THE CLEVELAND TRUST COMPANY,
CHRYSLER CORPORATION,
Respondents.

No. 11.

THE F. E. ROWE SALES CO.,
Petitioner,

vs.

THE CLEVELAND TRUST COMPANY,
CHRYSLER CORPORATION,
Respondents.

PETITIONERS' REPLY BRIEF.

JOHN H. BRUNINGA,
JOHN H. SUTHERLAND,
Attorneys for Petitioners.

October 19, 1940.

St. Louis Law Printing Co., 415 North Eighth Street. CEntral 4477.

BLANK PAGE

TABLE OF CONTENTS.

	Page
Point I	2
As to Exhibit 1	5
Point II	6
There is no evidence that the piston of the Jardine patent has the structure and mode of operation to secure the result put forward by respondent, namely, a "minute clearance," or a clearance of .002 inch	6
The Long commercial pistons were proved as having been in commercial use prior to March 11, 1920	10
1. Obsolescence	10
2. Clearance at .002 inch	11
3. Structure and mode of operation	12
Finally the Long commercial pistons had flexing webs	12
4. The Long patent did not have inflexible webs, and it does not so state	13
5. The Long commercial pistons were proved	15
There is even documentary evidence	16
6. This Court's decisions are determinative	17
Point III	22
The issue here has not become moot, but is still important so far as the public interest is concerned	26
Aluminum Company of America	28
"Patent pools"	28
"Sins of the past"	28
"'Smartness' of petitioners' brief"	30
The renouncement and denouncement of petitioners' now expired patents	30
Affidavit of Horace Duncan	33

Cases Cited.

Altoona Theatres v. Tri-Ergon, 294 U. S. 477, 489.... 4
Atlantic Works v. Brady, 107 U. S. 192..... 29
Berry v. Bohn Aluminum & Brass Corp., 29 F. Supp. 516, 517, 522 9
Camp v. Gress, 250 U. S. 308, 318..... 25
Cleveland Trust v. Berry, 99 F. (2d) 517..... 9
Crown Die & Tool Co. v. Nye Tool & Machine Works, 261 U. S. 24, 40..... 23
De Forest v. General Electric, 283 U. S. 664.....28, 30
Delk v. St. Louis & S. F. R. Co., 220 U. S. 580, 588.... 25
Downtown v. Yeager, 108 U. S. 466..... 29
Eames v. Andrews, 122 U. S. 40, 56.....18, 20
Eibel Co. v. Paper Co., 261 U. S., l. c. 53..... 16
Equitable Trust Co. v. Denver & R. G. R. Co. (C. C. A. 2), 250 F. 327, 340..... 23
Gayler v. Wilder, 51 U. S. 477, 497.....18, 29
Honolulu Oil Corporation v. Halliburton, 306 U. S. 550 14
Independent Wireless Telegraph Co. v. Radio Corporation of America, 269 U. S. 459, 464, 465..... 23.
Le Roy v. Tatum, 14 How. 156..... 28
Lovell Mfg. Co. v. Cary, 147 U. S. 628..... 3
Mast, Foos & Co. v. Stover Mfg. Co., 177 U. S. 485, 494 29
McCain v. Ortmayer, 141 U. S. 419, 428..... 29
McCarty v. Lehigh Valley, 160 U. S. 110..... 28
Milburn Co. v. Davis, 270 U. S. 390..... 14
Minerals v. Magna Copper, 280 U. S. 400..... 29
Permutit Co. v. Graver, 284 U. S. 52..... 28
Peters-Bates Case, 295 U. S. 392..... 22
Smith v. Hall, 301 U. S. 216..... 30
Smith v. Snow, 294 U. S. 1..... 30
Sterling Products Corp. v. Cleveland Trust, 94 F. (2) 1019 27

Thompson v. Boisselier, 114 U. S. 1 29
Twist v. Prairie Oil & Gas Co. (C. C. A. 8), 27 F. (2d) 470, 474 ..... 23, 24
Twist v. Prairie Oil & Gas Co., 274 U. S. 684, 692 23
Webb v. Portland Manufacturing Co., F. Cas. No. 17,322 25
White v. Dunbar, 119 U. S. 47 28

Statutes Cited.

R. S. 4886 ..... 21, 28, 29
R. S. 4888 ..... 4, 20, 21, 28
U. S. Code, Title 35, Sec. 67 (R. S. 4919) 23

BLANK PAGE

IN THE

SUPREME COURT OF THE UNITED STATES.

OCTOBER TERM, 1940.

No. 9.

THE SCHRIBER-SCHROTH COMPANY,

Petitioner,

vs.

THE CLEVELAND TRUST COMPANY,
CHRYSLER CORPORATION,

Respondents.

No. 10.

THE ABERDEEN MOTOR SUPPLY COMPANY,

Petitioner,

vs.

THE CLEVELAND TRUST COMPANY,
CHRYSLER CORPORATION,

Respondents.

No. 11.

THE F. E. ROWE SALES CO.,

Petitioner,

vs.

THE CLEVELAND TRUST COMPANY,
CHRYSLER CORPORATION,

Respondents.

PETITIONERS' REPLY BRIEF.

Respondent's brief is divided into a number of parts: the first part, pages 1-26, discusses the question of whether the issue has now become moot, the Aluminum Company of America and the patent pool, and, finally, what Respondent's counsel denominates "The Sins of The Past";

the second part, pages 27-34, is concerned with what Respondent's counsel denominates the "'Smartness' of Petitioners' Brief"; the third part, pages 35-88, discusses points I, II and III; and the fourth part, pages 89-101, again discusses the Jardine patent and the prior art, previously discussed in the second part.

We will first answer the second part under the Points noted in Petitioners' brief. We will not dwell at length upon the remaining parts of Respondent's brief, except to the extent absolutely necessary to assist this Court.

POINT I.

This is covered by Petitioners' brief, pages 29-44, and by Respondent's brief, pages 35-53. We shall treat the subject under the same designations as in Respondent's brief:

(a) The statement (Respondent's brief, p. 35) that the Court of Appeals did not treat "flexing webs" as essential elements of the Jardine patent is contrary to what Respondent's counsel said on the preceding page 24 of that same brief, namely,

> "... it has been determined as a part of the law of this case that the flexible web or web flexibility is an **essential** feature and **element** of the combination..."

Of course, at page 24 Respondent's counsel were discussing the prior art, while at page 35 the scope of the patent was discussed. Respondent's counsel evidently overlooked the fundamental rule of patent law, and indeed of common sense, that the scope of a patent when patent-

---

Note. The references are to pages of the Record as they appeared in the Court of Appeals. Emphasis in quoted parts is ours.

ability is being considered must be consistent with scope of the patent when infringement is in question.*

The question here is not simply one of whether a claim should be construed in connection with the specification, so that counsel's elaborate discussion of that phase and the analogies to contract law were unnecessary; the question is more narrow, as noted in Petitioner's brief, pages 29 and 41. Furthermore, the distinction between an element and a characteristic of an element is simply hair-splitting, and was discussed in Petitioner's brief, page 33. Indeed, the second decision of the Court of Appeals made no distinction when the Court, in discussing the Gulick and Maynard patents, said, page 4:

> ". . . it seems immaterial whether we read an element into them or merely construed an existing element as having in its environment a given characteristic."

The treatment by Respondent's counsel of Scaife v. Falls City (brief, page 41), seeks to make a distinction between a situation where this "peculiar form" of an element is in one claim of a patent and not in another claim, and a situation where it was originally in a claim and then taken out, after adverse decisions in interferences, as happened during the prosecution of the Jardine application. There is no distinction at all, and, besides, here counsel insist that flexibility should be read into the claims of the Jardine patent.

(b) Respondent's counsel state (brief, p. 42) that

"The omission of the word 'flexible' from the Jar-

* "In the testimony for the plaintiffs it appears to be contended that, in order to establish the charge of infringement, the patent is to be construed so as to cover the restoring of strained steel springs by the application of any temperature, less than a red heat, which will produce in the metal a blue color. If that be true, the patent must be so construed also in comparing it with the prior state of the art" (Lovell Mfg. Co. v. Cary, 147 U. S. 628).

> dine claims may have been deliberate and intentional without making the rule of construction inapplicable."

No decision was cited for the support of such a bold statement. The contract analogy cannot apply, because **R. S. 4888 requires two things, namely, a description and claims;** and it is the claims that define what is covered by the patent. Surely, when a limitation has been deliberately taken out of a claim, after an adverse decision in an interference, it cannot thereafter be put back by construction. This Court would not even permit a broad element, "means," to be restricted by a specific one, "a fly-wheel" (i. e., a rotating means), in Altoona Theatres v. Tri-Ergon, 294 U. S. 477, 489, cited in Petitioners' brief, page 33.

(c) Respondent's brief, page 43, makes the bold statement that "no such claims were added" by amendment by Jardine, including "flexible webs." Petitioners' brief, page 7, cited chapter and verse, and reference thereto will be sufficient. There can be no distinction because the Jardine claims are combination claims, for, likewise were those added by amendment, lost in interferences, and canceled.

(d) In Respondent's brief, page 45, we find a statement, as follows:

> "Upon the basis of this heresy it is claimed that the Court of Appeals considered that flexing webs was a distinguishing feature of Jardine and that it is necessary to read the flexing webs into the claims to avoid the prior art."

We invited the Court's attention at the beginning of this discussion to the quotation from page 24 of Respondent's brief. Statements, similar to the above, are found on pages 46 and 51; but it now appears that what Respondent attempts to do is secure a broader construction of the claims than those including flexing webs, to say nothing of

> ". . . the bending or flexing of straight ribs so pro-

> portioned as to yield to the thermal expansion of the bosses on the cantilever principle . . .",

which the Court of Appeals found it necessary to import into the Jardine claims in order to hold them valid over the Hartog patent (2d Dec., p. 8). However, in seeking to further distinguish from Hartog (brief page 52), counsel state as to Hartog's webs:

> ". . . they would not flex or bend **in the sense** in which the Jardine webs do to contribute to the solution of the aluminum piston problem",

although the previous argument was that the Jardine claims would not have to be construed to have flexible webs. But if Jardine's webs had to flex or bend in some specific way ("sense"), then counsel has confused the Jardine claims still further, by considering the Jardine webs "like a nose of wax which may be turned and twisted in any direction." (See White v. Dunbar, Petitioner's brief, page 31.)

As to Exhibit 1,* Respondent's brief, page 53, states that

> "The Exhibit 1 webs are flexible, and the only difference between the Exhibit 1 webs and the Jardine webs in that respect is a matter of degree of flexibility."

Counsel then quote Mr. Stellmann, who gave a direct answer to a direct general question, as counsel do when they say in their brief (p. 78) "a crowbar is flexible." Counsel do not quote the next question and answer, which are as follows (R. 581):

> "Q. Well, the webs 25 of the Jardine patent are described as flexible. **Do you find flexible webs** at the top in Exhibit 1? **A. No**; and Exhibit 1 is stiffer at the top than the Jardine."

Of the other record pages cited, R. 530 has reference to

*See Illustration, Petitioner's Brief, p. 26.

the Gulick patent; R. 593-5 has reference to a test by Jeffries of Exhibit 1 with the skirt detached from the head, and in which, of course, the skirt and not the webs flexed. However, Jeffries testified with reference to Exhibit 1 with the Keystone relief (R. 955) as follows:

> "The turning in of the webs at their outer ends in Plaintiffs' Exhibit 1 makes them more flexible in the thrust direction than the webs shown in the Maynard patent."

Such a construction, however, results in a web, which is **curved and not straight**, and therefore "of a resiliency in **arcuate extensions**," which the Court of Appeals found in the **Hartog patent** and distinguished from by assigning to **Jardine "straight ribs** so proportioned as to yield . . . on the **cantilever principle**" (2d Dec., p. 8). Respondent's counsel have not answered the discussion on Exhibit 1 in Petitioners' brief, pages 25-27 and 41-44.

POINT II.

This point was discussed in Petitioners' brief, pages 44-57, and in Respondent's brief, pages 54-84.

There Is No Evidence That the Piston of the Jardine Patent Has the Structure and Mode of Operation to Secure the Result Put Forward by Respondent, Namely, a "Minute Clearance," or a Clearance of .002 Inch.

The theme of Respondent's brief is that the piston of the Jardine patent has a structure and a mode of operation to secure a definite result, namely, a **"minute clearance,"** which is specified as a clearance of **.002 inch,*** and even **.001 inch,**** the ".002 or less" being the figure given

*Respondent's brief, pp. 21, 22, 23, 28, 33, 54, 55, 58, 65, 67, 72, 78, 81, 85, 92 and 99.

**Respondent's brief, pp. 26, 27.

by the Court of Appeals in its second decision (p. 8). Respondent's counsel (brief, p. 26) states:

> "It is important to remember that he was required to produce a piston in which there was to be, and to be roughly no more than, **one-thousandth** of an inch clearance between the piston and the cylinder. . . ."

Further (p. 27):

> "There is not a scintilla of evidence anywhere in this Record supporting a contention that any of the prior art devices could operate at this narrow clearance.† . . . None of them was capable of operating at the required one-thousandth inch clearance."

This is stated to be (p. 27 and repeated at p. 55) a

> "*sine qua non* of the solution of the problem."‡

It is stated (Res. Br. 65) that the Long piston was used only experimentally at a clearance of .002 inch and that the commercial use was at ".004 or .005 clearance."* In the concluding part of Respondent's brief (p. 89) it is stated,

> "Of course, if the solution of the aluminum piston problem and the sustaining of patent protection on the invention that solved that problem now rates as 'sins of the past,' that is an end of this litigation for, manifestly, we have no case on that basis."

It is self-evident, therefore, that if the sine qua non of Jardine's alleged invention, namely, the capability to operate at a clearance of .002 inch or less, and which is the

---

†Such denial is made with reference to the prior art generally in Respondent's brief, p. 21; with reference to Hartog and Pomeroy, p. 25; Long, pp. 54, 55, 58, 65, 67, 72, 78, 81 and 85, and Franquist, p. 99.

‡We find further in Respondent's brief such statements as (p. 72) "the necessary clearance of .002," and (p. 78) "the necessary clearance"; also (p. 81) "the desired clearance" and (p. 92) Jardine's "achievement."

*We have shown (Petitioners' brief, p. 23) that as early as 1920 the Long pistons were given a clearance of .002 inch when they went into production in the Franklin air-cooled engine (it is so stated in Franklin's Bulletin, R. 1587); but that later, when the compression and power increased, the clearance was increased from .004 inch to .005 inch.

mainstay of Respondent's brief, has no basis in the evidence, then, obviously, Respondent has "no case on that basis," **Respondent offered no evidence of commercial success of the Jardine piston at all** (see Petitioners' brief, pp. 24 and 27) and although Respondent's brief (p. 29) has a subchapter entitled, "Public Adoption and Commercial Use of Jardine," we find no evidence there. Respondent there relies upon Jeffries' testimony on prima facie which, he admitted on cross-examination, was based upon hearsay (R. 1045). Even the hearsay claim of supposed commercial success was based upon the piston of the Maynard patent* (R. 462, 471) and not on the Jardine piston. Respondent's witness Jeffries admitted that not a single Jardine piston has been sold and that the Jardine piston was subject to oil-pumping (R. 145). Not a single test of a Jardine piston was exemplified by any report, but Respondent contented itself with Jeffries' statement on cross-examination (R. 145):

> "It was proved in, however, and was about ready to be placed on the market when the Maynard Piston was brought forth . . . ."

Although that statement of Jeffries is not evidence, it must be taken with care, because of a similar statement that Exhibit 1 without the Keystone relief had been on the market, which was later on shown (Petitioners' brief, p. 27) to be based upon hearsay and refuted on cross-examination.

The assertion in Respondent's brief (p. 93):

> "In other words, he made the piston flexible enough to prevent the sticking and the seizing and at the same time made it possible to prevent the **oil pumping,**"

is contrary to the evidence because Jeffries admits (R. p. 145) that the Jardine piston was subject to oil pumping.

*Held invalid by the Court of Appeals.

The "invar strut" piston is now put forward in Respondent's brief (p. 29) as a "public adoption and commercial use of Jardine." Later, on page 56, it is stated that the Long piston "was driven out by the pistons involving the Jardine invention"; the references (R. 141, 176) are to the Ray Day piston held non-infringing, by the Court of Appeals in its second decision (p. 9). The reference (R. 187) is to "an attempt to commercialize the Jardine piston."

The reference (R. 672) is to the invar strut piston. This is Exhibit AAA, Plaintiffs' Exhibit 41, about which very little was said, being merely identified by Jeffries. A mere examination of that piston will show that any contention that Exhibit AAA comes within the Jardine patent is absurd. The piston is **not an all aluminum piston**, but is of a type having **steel struts**, of a lower coefficient of expansion than aluminum, so as to approximate the expansion characteristics and even be less, than the iron of the cylinder, so that **flexing is obviously unnecessary and not present.*** The principle of this strut piston is so radically different from that of an all aluminum piston having flexing webs that the absurdity of Respondent's position is self-evident.

We do not even have a model of the Jardine piston before the Court because none was offered at the trial or exhibited to the Court of Appeals. Accordingly, all the talk about Jardine solving a problem, the achievements of Jardine and his being the first piston to operate at a .002 inch clearance, or less—the so-called sine qua non of the Jardine alleged invention—has no basis in the evidence whatsoever. Respondent therefore has "no case on that

*This piston in its various forms is described in Berry v. Bohn Aluminum & Brass Corp., 29 F. Supp. 516, 517, 522, Exhibit 302. It is interesting also to note that there was a question of priority between Jardine and Berry on the strut piston, which was decided against Jardine by the Circuit Court of Appeals for the Sixth Circuit (Cleveland Trust v. Berry, 99 F. [2d] 517).

basis," as Respondent's counsel admit (brief, p. 89) they must have in order to prevail.

The Long Commercial Pistons Were Proved as Having Been in Commercial Use Prior to March 11, 1920.

Petitioners' brief (pp. 17-25, 53, 55) discusses the evidence. Respondent's contention as to this Long piston, although scattered throughout Respondent's brief, we understand, is based upon the points:

1. That the Long piston became obsolete and therefore could not have been commercially successful;

2. That the Long piston did not operate commercially at a clearance of .002 inch, asserted as the *sine qua non* of the Jardine patent piston;

3. That the Long piston did not have the structure and mode of operation of the Jardine piston; and

4. That the Long patent disclosed inflexible webs;

5. That the Long pistons were not proved;

6. That this Court's decisions cited by Petitioners do not apply.

1. **Obsolescence.** The argument is amusing. The Master found (finding 37, R. 1102-3), as noted by this Court (305 U. S. 55) that the Long pistons "were in commercial use from 1917 on." According to Respondent's witness Castor, the Long pistons were used exclusively in the Franklin automobile from **1920 to 1929**, to a total of over **350,000** pistons, but that in 1929 compression in the Franklin was increased, and that the Long piston was then replaced, not by Exhibit 1, but by the invar strut piston (R. 672).* The

*We showed in Petitioners' brief, pages 24-5, that Long was literally driven out of the field by Respondent.

Jardine slipper piston never appeared on the market at all, and not even a model could be produced in Court—all as shown above. It was also shown in Petitioners' brief, page 27, that Exhibit 1 with the Keystone relief was actually the first proved use of Exhibit 1, which was not until at least February, 1925.** According to Respondent's brief (page 2), Exhibit 1 has "become obsolete since this suit was tried"—but let us call that 1940. We, therefore, have the Long piston as the first commercial split skirt aluminum piston in use from 1917 to 1925, and in continuous use from 1917 to 1929, a total of **twelve years.** Exhibit 1 had a life of **fifteen years.** The Jardine piston had no commercial life at all. We think that this answers the question of obsolescence of the Long piston as affecting its commercial utility.

2. **Clearance at .002 Inch.** As shown previously, there is no proof that any Jardine piston ever would or could operate at a clearance of .002 inch, because it never went into commercial use. There is no evidence that even Exhibit 1 without the Keystone relief operated in commercial use at a clearance of .002 inch or less or at any other clearance. As pointed out in Petitioners' brief (pages 23-4), the testimony of Respondent's witnesses shows that the Long piston at the beginning operated at .002 inch clearance; that in 1920 it operated at .002 to .003 inch clearance, but that in 1929 the clearance was increased to .005 inch, as against the invar strut (not all-aluminum) clearance in 1929 of .0025 to .003 inch. Surely, reliance cannot be had upon a piston whose clearance requirement was not proved

**The attempt of Respondent's counsel to set that date back to 1921 (Br. 34) must fail. Mr. Stellmann at the record page cited (462) was asked about a piston "like that shown in the drawing of the Maynard patent 1,655,968," and he said that his memory was "around 1921." On redirect (471) he was not certain whether it had a slot in it. Be that as it may, the Maynard patent piston could not be the Jardine patent piston and still be capable of patent protection because the Court of Appeals held the Maynard patent invalid as "not marking inventive steps over prior art" (2d Dec., p. 5).

so as to render ineffective as a statutory bar a piston whose clearance was proved. Surely a thing which never went into commercial use cannot be said to stand out against something which was in commercial use for twelve years.

3. **Structure and Mode of Operation.** We have shown under Point I how indefinite is Respondent's contention as to the structure and mode of operation of the Jardine piston. If by structure is meant a strictly slipper piston, then, of course, the Long piston was not a slipper piston, but neither is Exhibit 1, which the Court of Appeals in its first decision (p. 11) specifically said is not a slipper piston. A mere comparison of Exhibit 1 and the Long piston will show that Long retains the side supports at the bottom in the regions of the bosses, as does Exhibit 1. If the characteristic feature of the Jardine patent is what Jeffries said it was, or what the Court of Appeals said it was, then Exhibit 1 does not have the flexible webs of the Jardine piston, see Petitioners' brief (pages 42-3). This shows the tenuous and even weird procedure that Respondent follows in seeking to find validity on the one hand and infringement of the Jardine patent on the other hand.

Finally, the Long commercial pistons had flexing webs; more so than has Exhibit 1, even with the restrictions which the Court of Appeals read into the Jardine claims in order to distinguish them from Hartog. The attempt of Respondent's counsel to overcome the fatal admission of Respondent's witness Jardine, discussed in Petitioners' brief, pages 48-50, will not, it is believed, satisfy this Court. We feel confident that if this Court will read the cross-examination of Jeffries (R. 985-7 and 1007-9), preceding the fatal admission (R. 1009-10), and also the additional cross-examination (R. 1010-11)—all relating to Long pistons—this Court will come to the conclusion that

there was no "private contest for dominancy in a colloquy," as distinguished from "an effort to ascertain the true facts upon which justice can be reached," as charged in Respondent's brief, page 78. Indeed, such a contention is absurd with a witness as expert, astute, and sophisticated as was Dr. Jeffries, and with Respondent represented at the trial by no less than two able counsel, who did not fail to redirect Dr. Jeffries on matters where they thought their case had been damaged, provided the damage could have been repaired.

4. **The Long Patent Did Not Have Inflexible Webs, and It Does Not So State.** The Long patent, on which we need not rely for web flexibility because it was in Exhibit F, before Jardine filed, states the following (R. 1737-1738):

> ". . . when highly heated conditions exist the body portion of the piston comprised of the wrist pin sides 4 and separated portions 6 can expand without fitting too tightly against the cylinder wall, as the expansion thereof will be taken up by the slots 7 and 8, as **expanding and contracting resiliency** is given to the body portion 3 of the piston by the separated portions thereof."

The above statement certainly does not say that the webs are inflexible. Nor does the part quoted by Respondent's counsel (brief page 82) that

> "'Inasmuch as the separated **portions 6** will be rigidly held against bending against the forcing thrust of the piston from the connecting rod of the piston . . .'"

say that the webs 10, previously discussed, are rigid, because "**portions 6**" refers to the **skirt parts**, which lie circumferentially against the cylinder wall, and which, of course, hold the conforming skirt against bending.

In short, while the patent is silent on whether the webs of the Long patent are flexible, the specification certainly

does not say that they are inflexible, as did the Gulick application when filed.

Respondent's counsel, however, in that part of their brief discussed under Point I, in seeking to bolster up their contention that the Court of Appeals was warranted to read flexing webs into the claims of the Jardine patent, said, page 41:

> "They only interpreted structure already in the claims as having a certain property which the specification described it as having and which the merest tyro in the business would know that it did have whether it was in the specification or not."

That concession of Respondent's counsel should settle the matter of whether or not, to one skilled in the art, the Long patent disclosed a piston having flexible webs.

There is no inconsistency in Petitioners' position in this respect in Petitioners' brief, page 56, with the position taken by Petitioners before this Court, when the Gulick patent was involved, as charged in Respondent's brief (page 84). In the first place, the Gulick application was not one in which the specification was silent, but one in which the description in the specification was the very antithesis, namely, "an extremely rigid connection between the piston pin bosses and the skirt of the piston." Second, before Jardine filed, both Hartog and Pomeroy had already described flexible webs, so that one skilled in the art would naturally read Long's disclosure in his application* (filed March 7, 1919) as having flexible webs.** That was the basis of the argument in Petitioners' brief, pages 55-57.

---

*Note here that the disclosure in an issued patent is effective from its filing date (Milburn Co. v. Davis, 270 U. S. 390).

**In Honolulu Oil Corporation v. Halliburton, 306 U. S. 550, this court decided that the use of an old expedient "is necessarily implied from the language of the Franklin patent. Detailed description by Franklin was not necessary" (l. c. 559).

5. **The Long Commercial Pistons Were Proved.** The evidence is found in Petitioners' brief, pages 17-25, and argued, pages 53-55. Respondent's argument overlooks the positive evidence in this case, to say nothing of circumstantial evidence, in which the links of the chain fit together to make a whole. The three witnesses called by Respondent, primarily to rebut the existence of the Long piston prior to 1919, clearly prove such use, and even commercial use, in 1919; and Jeffries said he was familiar with the Long pistons in 1920 (R. 940).* We will not take up one by one the citations by Respondent's counsel, since that would unduly extend the brief, for the record, which has been reduced, is before this Court; but we will simply give a few examples of the hair-splitting and errors in Respondent's brief.

Reference to R. 666 will show that the Long pistons did not fail in 1919, but that the fault of "a test" was due to a faulty oiling system. Burns testified (R. 676) about an entirely different piston; but he said, as to the 1919 Long piston, Exhibit F (R. 690, 691):

> ". . . they didn't set up; **they were beautiful**, when this trip was completed, about 900 or 1,000 miles on them, this car was pulled down after I made the installation, and **they were all in fine shape. . . . That Long piston was the first piston that was quiet and would go out and do a real day's work.**"

Jeffries (R. 939) talked about a single piston, Exhibit F, and not as it appears on cross-examination (R. 1010), the Long pistons generally. Venner's testimony (R. 360) has reference to one of the first Long pistons, but in which there was trouble due to a faulty oiling system (R. 370).

*Note that there is no question as to what pistons Jeffries saw in 1920, for previously the Long pistons, Exhibits E and F, had been discussed (R. 939). Furthermore, in giving the 1920 date (R. 986), Long pistons Exhibits E and F were discussed and Jeffries says, "Yes, these were used."

Murphy's testimony (R. 656) has reference to a different piston, as also does the testimony at R. 1438, R. 1440-1, and R. 1443, while R. 1458 does not even relate to this subject. Chadwick (R. 380) testified about strengthening the head of the piston with three ribs rather than one rib, and not that that they fell apart. Jeffries' testimony (R. 1010-11) is about tales brought in by the automotive engineers of Aluminum Company. The quibbling about such matters as "type" not referring to a particular piston is puerile; the reference to Venner's testimony (R. 389) shows that Venner intended the word "type" to mean that "it was of the same construction." Of course the Long piston is of the "type" "shown" in the Long patent, so the statement in Respondent's brief (p. 67) is again puerile. Nor is it correct for Respondent's counsel to state in their brief (p. 68), "The testimony regarding the use of the Long pistons was adduced by deposition." As a matter of fact, Stellmann testified before the Master after his deposition was read while he sat in court. Murphy, Castor, and Burns testified before the Master and so did Jeffries.*

There is even documentary evidence in 1919 corroborating the witnesses in the evidence of the Long pistons, Exhibits E and F, namely, the **drawing of the Long patent**, which Respondent's counsel admit in their Brief (pp. 62, 64) is "similar to Exhibit F" and "of the type of Exhibit F." There is also **a drawing**, Exhibit BB-1, which bears a 1919 date and which was found in the Franklin records by Respondent's witness Castor (R. 670) and which clearly has the relief in the regions of the bosses. It does not matter that that particular piston was not put into production. Then we have the **license agreement** (R. 1632) which refers to the then pending application of the

*A case that can be made out in all its elements by cross-examination of opposing witnesses is a strong case (Eibel Co. v. Paper Co., 261 U. S., l. c. 53).

Long patent and having also a 1919 date. Then we have the pattern records produced by Gilbert, all as set out in Petitioners' brief (p. 21). Surely the links of the chain connect up more than in any ordinary case, whether a patent case or otherwise.

The fact that the Long pistons scored opposite the webs in 1929, as stated by Respondent's witness Burns (R. 672), does not mean the Long pistons were even impractical. As admitted by Jeffries (R. 1057) that is the point of greatest wear, and Exhibit 1 without the keystone relief wore down at those points. Of course, that is why the keystone relief was added, but that was not done until 1925, as shown in Petitioners' brief (p. 27). In other words, Exhibit 1 without the keystone relief was subject to scoring in 1925, in a water-cooled engine, while the Long piston was not subject to such scoring until four years later, and in an air-cooled engine at that. That explains why Long could not ever be replaced by Exhibit 1 even with a keystone relief.

There is no doubt but that the Long pistons, Exhibits E, F, and G, were proved to have been in existence prior to Jardine's filing date. These pistons are now before the court; they were known to Jeffries since from 1920 on. Jeffries had one of these pistons before him, and he testified not only that the webs were flexible, but "flexible enough." That should settle the matter of the Long commercial pistons being statutory bars against the Jardine patent. Here Respondent's counsel cannot quibble on the amount of flexibility, when Exhibit 1 is a stiff piston, as specifically found by the Master, who not only heard and saw the witnesses, but observed the tests made (Petitioners' brief, page 42).

6. **This Court's Decisions Are Determinative.** This court's decisions construing R. S. 4886 were discussed in Petitioner's brief (p. 45). Respondent's brief (pp. 28,

76, 72), however, cites this court's decisions in Gayler v. Wilder, 51 U. S. 477, 497, and Eames v. Andrews, 122 U. S. 40, 56. An examination of these decisions will, however, show that these very decisions support Petitioners' contentions.

Gayler v. Wilder involved a situation where the prior use of a safe relied upon was sought to be established by **oral** testimony, 51 U. S. 495, **no exemplification** being produced, because "the safe itself had disappeared" (p. 498). There was **no evidence** that any "**test** had been applied to it, and its capability for resisting heat was not known" (p. 497), or that it had **even been used** as "a place for security of papers against fire" (p. 496). Indeed, that was a case which is known in patent law as establishing the principle that something "finally forgotten or abandoned" (pp. 496, 498) is, in Patent Law, one of "**The Lost Arts**" (p. 497). The facts are stated on pages 495-6, and this court says:

> "It does not appear what became of this safe afterwards. And there is nothing in the testimony from which it can be inferred that its mode of construction was known to the person into whose possession it fell, or that any value was attached to it as a place of security for papers against fire; or that it was ever used for that purpose.
>
> "Upon these facts the court instructed the jury, 'that if Conner had not made his discovery public, but had used it simply for his own private purpose, and it had been finally forgotten or abandoned, such a discovery and use would be no obstacle to the taking out of a patent by Fitzgerald or those claiming under him, if he be an original, though not the first, inventor or discoverer.'"

This court, after quoting from the Act of 1836 that the subject matter of the patent shall have been "not known or used by others before his discovery or invention," says (p. 497):

> "The clause in question qualifies the words before used, and shows that by knowledge and use the legislature meant knowledge and use existing in a manner accessible to the public."

This court, however, finally says (p. 498):

> "We do not understand the Circuit Court to have said that the omission of Conner to try the value of his safe by proper tests would deprive it of its priority; nor his omission to bring it into public use. He might have omitted both, and also abandoned its use, and been ignorant of the extent of its value; yet, if it was the same with Fitzgerald's, the latter would not upon such grounds be entitled to a patent, provided Conner's safe and its mode of construction were still in the memory of Conner before they were recalled by Fitzgerald's patent."

From the above it will be seen that the evidence of the Long commercial pistons is not like the evidence in Gayler v. Wilder, but that it is such as this court said in the last part quoted establishes a statutory bar prior to Jardine's filing date of March 11, 1920. **The Exhibits, F, E and G, are before the court; their "mode of construction was known," and their "capacity for resisting heat was known."**

Their "mode of construction was still in the memory of" the witnesses: Petitioners' witnesses Stellman, Venner, Chadwick and Royalty, and even Respondent's witnesses Murphy, Castor and Burns. They were even within the memory of Dr. Jeffries, who was familiar with them in 1920, and testified that in Exhibit F the webs were not only flexing, but, indeed, "that they were flexible enough." They were in use from 1917 to 1929, that is, three years before and nine years after Jardine filed to the extent, in 1920-1929, of 360,000 pistons.

Eames v. Andrews, 122 U. S. 55-56, contains the following statement:

> "It is to be observed that the scientific theory and principle, the application of which is supposed to constitute the invention of Colonel Green, are not set forth either in the original or reissued patents. This feature was commented upon by Mr. Justice Blatchford in Andrews v. Cross, 19 Blatchford 294, 305, as follows: 'It may be that the inventor did not know what the scientific principle was, or that, knowing it, he omitted, from accident or design, to set it forth. That does not vitiate the patent. He sets forth the process or mode of operation which ends in the result, and the means for working out the process or mode of operation. The principle referred to is only the why and the wherefore. That is not required to be set forth. Under section 26 of the act of July 8, 1870, 16 Stat. 201, under which this reissue was granted, the specification contains a description of the invention and of "the manner and process of making, constructing, compounding, and using it," in such terms as to enable any person skilled in the art to which it appertains to make, construct, compound, and use it; and, even regarding the case as one of a machine, the specification explains the principle of the machine, within the meaning of that section, although the scientific or physical principle on which the process acts when the pump is used with the air-tight tube is not explained. An inventor may be ignorant of the scientific principle, or he may think he knows it and yet be uncertain, or he may be confident as to what it is, and others may think differently. All this is immaterial, if by the specification the thing to be done is so set forth that it can be reproduced.'"

In the first place, this decision involves a construction of R. S. 4888 relating to the requirement of what a specification of a patent sought to be enforced must contain as distinguished from R. S. 4886, relating to statutory bars.

This requirement of R. S. 4888 is stated in the above quotation but is not contained in R. S. 4886, because the latter does not require that the "principle of the machine" of a prior known or used or sold device must have been known to anybody, and this court so decided in De Forest Radio v. General Electric Company, cited in Petitioners' Brief (p. 45).

Second, the decision itself, even as applied to R. S. 4888, distinguishes between "the scientific theory and principle," that is, "the scientific principle" and "the process or mode of operation which ends in the result, and the means for working out the process or mode of operation." As this court says, "the principle referred to is only the why and the wherefore. That is not required to be set forth . . . if by the specification the thing to be done is set forth, that it can be reproduced."

This court did not depart from such a construction of R. S. 4888 in its previous decision in this case, because the question of whether the Gulick original application disclosed flexing webs was one of mechanical construction and proportioning, that is, whether "by the specification the thing to be done is so set forth that it can be reproduced." Surely with the Gulick original specification specifying extreme rigidity it could not be said that by the specification the thing to be done was so set forth that laterally flexible webs could be reproduced.

As we have poinfed out above, R. S. 4886 does not have the requirement of R. S. 4888, particularly as to a prior use, because a prior use is a tangible thing, and accordingly "the thing to be done is so set forth that it can be reproduced." The only thing lacking that Respondent relies on, and which the Court of Appeals relied on, is that the scientific explanation of the mode of operation was not understood,* which this court said was unnecessary not

*We have shown that Stellman did understand that in 1916 (Petitioners' Brief, p. 18).

only as to a prior use, but even as to a prior patent or publication,** in order to be a statutory bar under R. S. 4886.

POINT III.

Respondent's Brief, pp. 86-89, distorts our Point III and attempts to present a question of defect of parties-plaintiff which we unsuccessfully raised in the District Court, but waived by deliberately failing to except. Our Point III asserted that Respondent has no right to injunctive relief, it does not challenge Respondent's right to damages. But Respondent's presentation of it as a defect of parties-plaintiff converts it into a challenge of Respondent's right to any and all kinds of relief.

Respondent's intrigue, by way of confessing a defect of parties (for damages as well as injunction) is an attempt to lure the Court into dismissing the Certiorari and thereby in effect AFFIRMING the decision of the Circuit Court of Appeals. The Peters-Bates case (295 U. S. 392) is cited as an authority, but in that case, unlike this, dismissal of the certiorari accomplished dismissal of the suit because the Court of Appeals in that case had ordered the case dismissed. Were this Court to dismiss the certiorari as Respondent urges, Respondent would be left with an undisturbed adjudication by the Court of Appeals, holding the Jardine patent valid and infringed, and holding Respondent entitled to its injunction. Manifestly, this Court should not decide our Point III by dismissing the certiorari.

These cases cannot be dismissed merely because Respondent is not entitled to an injunction.* Respondent, and only Respondent, has a right at law to recover dam-

**See footnote to Petitioners' Brief (p. 46).

*Our suggestion, Brief p. 59, that the bills should be dismissed was an inadvertent overreaching of the established practice of transferring a case to the law side in such circumstances.

ages. Under Title 35, Sec. 67 of the U. S. Code (R. S., Sec. 4919), at law damages may be recovered in the name only of the holder of the legal title. Crown Die & Tool Co. v. Nye Tool & Machine Works, 261 U. S. 24, 40; Independent Wireless Telegragh Co. v. Radio Corporation of America, 269 U. S. 459, 464, 465.

Respondent instituted this proceeding, which is a bill in equity in its nature as well as in its form, and which seeks both legal and equitable relief, but the only remedy open to Respondent was at law. This is a situation parallel to that in Twist v. Prairie Oil & Gas Co., 274 U. S. 684, 692. In that case this Court, because the Circuit Court of Appeals had refused to hear the case on its merits, remanded the case with the suggestion that it might consider the case on the merits as on an equity appeal in the view that at such stage of the proceedings it was desirable to hold that the objection to the equity jurisdiction had been waived. Upon remand the court of appeals in Twist v. Prairie Oil & Gas Co. (C. C. A. 8), 27 F. (2d) 470, 474, accepted the suggestion of this court and proceeded to hear the case on the merits as if it were an equity appeal, upon the theory that the case had progressed so far it was desirable to hold that the objection to the equity jurisdiction had been waived.

In the case Equitable Trust Co. v. Denver & R. G. R. Co. (C. C. A. 2), 250 F. 327, 340, plaintiff brought in equity that which was not an equity action, and thereby obtained injunctive relief, which, when considered in the light of the case actually made, amounted to the use of a writ of injunction as the substantial equivalent of a warrant of attachment. For this there was no warrant. Plaintiff obtained a money judgment for breach of contract. The question of jurisdiction was never raised in the court below; the action was brought to the Court of Appeals by an appeal. The court held that the power of transferring

a case to the proper side of the court existed at any stage of the litigation, and that they could give the direction as well as the district court. The court of appeals, therefore, ordered that the case be remanded with directions to the district court to transfer the same to the law side of the court, and that, so transferred, that the money judgment entered therein be affirmed, further ordering that the several injunctions issued in the course of the litigation should be vacated and set aside. It will be seen that the court there considered the case as one in which a law action was tried by consent without a jury. That action is remarkably parallel to the present one. It was cited with approval by this court in Twist v. Prairie Oil & Gas Co., 274 U. S. 684, 689. It is clear, of course, that these decisions referred to rest upon the provisions of Equity Rules 22 and 23, this court holding in Twist v. Prairie Oil & Gas Co., supra, that under these rules either the trial court or the appellate court might transfer the case to the law side.

In view of the long pendency of the present cases, and the number of times they have been before the courts, this court should decide the case on its merits as if it had been tried at law with jury waived. In the present case, therefore, after a decision on the question of Respondent's right to an injunction, there remains for consideration the award of profits and damages and an accounting therefor, and a dismissal cannot be made until these questions are disposed of.

Respondent in its brief states that the damages in these cases are limited to one dollar each under the final decree (entered before the cases were here previously), but that is not technically correct, because the limitation of damages by decree applied only to the Gulick and Maynard patents, which are not now involved. The decree did not limit damages as to the Jardine patent, but dismissed without prejudice as to it. Furthermore, an award of nominal damages in this case would carry with it the costs or a

part of them, which would be considerable. In addition, the amount involved is not a criterion. A decision of validity and infringement with an award of one dollar is res judicata as to the parties (and in this case extends to Sterling Aluminum Products, Inc.), it is an adjudication of their rights and is important far beyond any damages which may be actually assessed in these cases. The case Webb v. Portland Manufacturing Co., F. Cas. No. 17,322, decided by Justice Story, demonstrates the importance of a decision, and a correct decision even though there is no proof of actual damages. In that case (29 F. Cas. p. 509) it is said that wherever there is a clear violation of a right it is not necessary to show actual damage, that every violation imports damage and if no other be provided the plaintiff is entitled to a verdict for nominal damages. It follows, of course, that a defendant is entitled to have an erroneous judgment against him set aside even though that judgment is for nominal damages.

This case is here on writ of certiorari, and is therefore before this court with a power to decide the case as it was presented to the Circuit Court of Appeals, and any contention properly saved must be examined. This statement is supported by Camp v. Gress, 250 U. S. 308, 318, where it is said, "the contention must be examined, as the whole case is here on writ of certiorari and the objection was properly saved."

In Delk v. St. Louis & S. F. R. Co., 220 U. S. 580, 588, the court said:

> "As the case is here upon certiorari to review the judgment of the circuit court of appeals, this court has the entire record before it, with the power to review the action of that court, as well as direct such disposition of the case as that court might have done when hearing the writ of error sued out for the review of the action of the circuit court."

In summary, plaintiff has brought these suits in equity, but is not entitled to an injunction while being entitled to an award of damages at law, if the Jardine patent is valid and has been infringed. In view especially of the long course of these cases through the courts, if the lack of equity jurisdiction is found to exist, the cases should be treated as if they had been transferred to the law side (with jury waived); and a final disposition of the cases should be made. These cases may not be finally disposed of until the errors properly assigned have been considered, and those errors include questions involving the validity and infringement of the Jardine patent.

The Issue Here Has Not Become Moot, But Is Still Important So Far As The Public Interest Is Concerned.

Respondent's brief discusses this, pages 1-3, of course, with the view of having this Court dismiss the writs of certiorari; and that is also, obviously, the purpose of the discussion under Point III, pages 86-89, which has been answered in this brief under III.

It is stated in Respondent's brief, page 2, that Exhibit 1 "has become obsolete since this suit was tried," and an affidavit of McCoy, one of Respondent's counsel, has been appended to Respondent's brief. This is a rather strange position to take now, when the argument before the Court of Appeals was that the Jardine piston was a solution of the problem, and it is even now so contended later on in Respondent's brief. Respondent certainly did not tell the Court of Appeals that Exhibit 1 had become obsolete. Indeed, Respondent's counsel even now (Brief, p. 10) quote a part of the decision of the Court of Appeals, stating that that court was impressed with the efforts "to completely solve the problem" and that "success is finally attained."

The affidavit of McCoy is incomplete and misleading and shows that McCoy was not familiar with the facts; accordingly, appended to this brief is an affidavit of Horace Duncan, who is fully familiar with the facts. This Court can take judicial notice of the fact that there are many Model A Ford cars still running. Duncan states that the replacements by Ford Motor Company alone are even now from 5,000 to 6,000 pistons per month, manufactured in the Sixth Circuit, to say nothing of a piston manufacturer, also in the Sixth Circuit, cited by Duncan. The fact that Sterling Products Corporation, who supplied Ford Motor Company with the piston castings for the Ford Model A car, and sold machined castings, voluntarily stopped manufacturing the pistons after the first decision of the Court of Appeals, does not change the situation, but shows Sterling's deference for the decisions of the Court of Appeals in suits against Sterling's customers; Sterling being referred to in Respondent's brief as "their patron" (p. 2) and "the sponsor of the Petitioners who is **defending this suit**" (p. 94).

It further appears from the affidavit of Duncan, and from the decision of the Court of Appeals in Sterling Products Corp. v. Cleveland Trust, 94 F. (2) 1019, that Sterling is plaintiff in a suit against Respondent to restrain Respondent from proceeding against other of Sterling customers. It appears further from Duncan's affidavit that there is a counterclaim pending in that suit, at Cleveland, i. e., in the 6th Circuit, for infringement of patents, including the Jardine patent.

The purpose of the effort to prevail upon this court to dismiss the writs of certiorari is, therefore, apparent, namely, to retain the erroneous decision of the Court of Appeals effective against Sterling as a privy, and to interfere with the use of these pistons in the 6th Circuit, in which is concentrated practically all of the automobile manufacturing business of this country.

Aluminum Company of America: Respondent's tirade (brief, pp. 3-4) against our mere mention of the name of Aluminum Company of America, in tracing the title of the Jardine patent and in designating the exclusive licensee, is wholly unjustified. As to whether we attempted "to parade" a name, our brief bespeaks its own acquittal.

"Patent Pools: We find a similar tirade (brief, pp. 5-6) against our mere mention of the fact that the Jardine patent was one of a "pool" of patents, under what this Court referred to as a "pooling agreement" (305 U. S. 49). As to whether we attempted to mention this "by way of attempted derogation," again our brief bespeaks its own acquittal. Despite the opportunities afforded by the Record, we scrupulously avoided mention of sins, which the die-hards might say "influence the issues in this case."

"Sins of the Past": Here we find a discussion in Respondent's brief, pages 6-19, followed by a discussion of what Respondent's counsel denominates "certain fundamental and salient rules of patent law" (brief, pages 20-26). What the purpose of this discussion was we fail to understand, because the questions before this Court involve: Point I, R. S. 4888, relating to claim construction; Point II, R. S. 4886, relating to the requirement of public use as a statutory bar, and Point III, relating to a construction of the injunction statute, 38 U. S. C. A. 384.

The cases cited by Petitioners under Point I were: White v. Dunbar, 119 U. S. 47, decided in 1886; McCarty v. Lehigh Valley, 160 U. S. 110, decided in 1895, and Permutit Co. v. Graver, 284 U. S. 52, decided in 1931.

The case cited by Petitioners in support of Point II, De Forest v. General Electric, 283 U. S. 664, was a recent decision; however, Le Roy v. Tatum, 14 How. 156, relied upon by this Court in that case, was decided in 1852, while

Gayler v. Wilder, 51 U. S. 477, relied upon by Respondent, and which also supports this Court's views in the last case, was decided in 1850.

On the question of what does and what does not constitute invention under R. S. 4886, this Court early developed the legal principles of patent law. In Thompson v. Boisselier, 114 U. S. 1, decided in 1884, this Court said, l. c. 11: "The beneficiary must be an inventor and he must have made a discovery." In Atlantic Works v. Brady, 107 U. S. 192, decided in 1882, this Court said, l. c. 200, that "an indiscriminate creation of exclusive privileges" for matters involving things "which would naturally and spontaneously occur to any skilled mechanic or operator in the ordinary progress of manufacture," "tends rather to obstruct than to stimulate invention." In McCain v. Ortmayer, 141 U. S. 419, 428, decided in 1891, this Court pointed out that "the generality of sales" cannot be "made the test of patentability." In Minerals v. Magna Copper, 280 U. S. 400, decided in 1930, cited by the Master (R. 1184), this Court decided that commercial success cannot be attributed to a later patent when an earlier patent, owned by plaintiff, but expired, was broad and comprehensive. In Mast, Foos & Co. v. Stover Mfg. Co., 177 U. S. 485, 494, decided in 1900, this Court stated that,

> ". . . in determining the question of invention, we must presume the patentee was fully informed of everything which preceded him, whether such were the actual fact or not,"

and that R. S. 4886 is "inexorable" and

> ". . . denies the patent, if the device were known or used by others in this country before his invention."

In Downtown v. Yeager, 108 U. S. 466, decided in 1882, cited in Respondent's brief, page 25, this Court shows, l. c. 474, that the patent in suit must be considered in the light

of the "then well known state of the art"; and that view has been consistently followed by this Court, as will be seen from DeForest Radio v. General Electric, 283 U. S. 664.

It is therefore submitted that this Court has preserved the fundamental and salient rules of patent law, as developed by this Court's decisions for nearly a century.

Page 6 of Respondent's brief, and the footnote is even misleading. The patent in Smith v. Snow, 294 U. S. 1, was held valid and construed broadly so as to make out a case of infringement. Later, in Smith v. Hall, 301 U. S. 216, 232, the claim, as construed by this Court in the previous case, was held invalid over a prior use, and the plaintiff was not permitted to narrow it to avoid invalidity.

"'Smartness' of Petitioners' Brief" (pp. 27-35). Under the above heading, Respondent's counsel proceeds to parade what counsel considers "half truths" in Petitioners' brief. Such is not the case at all, and the eighteen pages do not show that such is a fact. We, therefore, consider it unnecessary to reply thereto.

The Renouncement and Denouncement of Petitioners' now Expired Patents: The Franquist, Ricardo, Schmiedeknecht, Pomeroy, and Hartog patents were discussed in Petitioners' brief, pages 9-17. Here, however, we find a strange proceeding in that Petitioners' own patents are not only denounced but renounced by Respondent (brief, pp. 21, 30, 99, 100), although four of these are in the pool of patents held by Respondent's Trust Estate. Franquist and Schmiedeknecht were in the suit against Sterling's customer, Simmons (R. 101, 2299), and Schmiedeknecht, although held invalid by the Court of Appeals, was in this suit, and the allegation of infringement was of Exhibit 1. The Pomeroy patent (R. 1803) issued to Aluminum Com-

pany and was assigned to Respondent. Hartog issued to Respondent (R. 1797).

The Master (R. 1120) discussed the denouncement of the Franquist patent in these causes. As to Pomeroy, it is now stated (brief, p. 100), "his scheme is fantastic," although that patent describes an aluminum piston with flexing webs. As to Hartog, it is stated (brief, p. 21) that "no piston could" operate in the manner described in the Hartog patent, and, further (p. 30), Respondent's counsel assert "the apparent inoperativeness of Hartog." The high point of Respondent's attack on its own patents, however, is on the Schmiedeknecht patent, previously included in this suit and alleged to be infringed by Exhibit 1. Respondent's brief, page 100, not only states that if Schmiedeknecht were provided with a T-slot it would "fall apart," although Exhibit 1 with the T-slot was alleged to infringe the Schmiedeknecht patent in this cause, but it is even stated, "The corpse and live man analogy . . . applies," the previous statement being, "the comparison is no more than that between a corpse and a living man. . . ."

This is certainly a strange position to take, when up to the very last in the Court of Appeals, Respondent not only relied upon the Schmiedeknecht patent as being valid, and therefore operative and of utility, but as being infringed by Exhibit 1. Although the Schmiedeknecht patent has expired, there has been no surrender of either of the Hartog or Pomeroy patents to the Patent Office, and we wish to assert, without fear of denial, that Respondent has actually filed, and has now pending, an application for a reissue of the Hartog patent.

It is respectfully submitted that the Jardine patent here in suit is invalid, that Petitioners have not infringed, that

Respondent is not entitled to an injunction, and that the decision of the Circuit Court of Appeals for the Sixth Circuit should be reversed.

Respectfully submitted,

JOHN H. BRUNINGA,
JOHN H. SUTHERLAND,
Attorneys for Petitioners.

October 19, 1940.

In the Supreme Court of the United States.

October Term, 1940.

The Schriber-Schroth Company, Petitioner, vs. The Cleveland Trust Company, Chrysler Corporation, Respondents.	No. 9.
The Aberdeen Motor Supply Company, Petitioner, vs. The Cleveland Trust Company, Chrysler Corporation, Respondents.	No. 10.
The F. E. Rowe Sales Co., Petitioner, vs. The Cleveland Trust Company, Chrysler Corporation, Respondents.	No. 11.

AFFIDAVIT OF HORACE DUNCAN.

State of Missouri, } ss.
City of St. Louis. }

Horace Duncan, being duly sworn, deposes and says that he is Secretary and Treasurer of Sterling Aluminum Products, Inc. (formerly called Sterling Products Corporation); that he has been engaged in and is familiar with the aluminum piston business, and that he has been and is in position to estimate the volume of business done by the com-

petitors of Sterling Aluminum Products, Inc. (formerly Sterling Products Corporation).

That he is informed and believes that Ford Motor Company has been, and is still, manufacturing at Detroit, Michigan, aluminum pistons of the construction of Exhibit 1, except having a rib on each web extending downwardly at an angle from each wrist pin boss toward the slotted side of the piston, and that these pistons are sold by Ford dealers for replacement purposes in Ford Model A automobiles in the Sixth Circuit and elsewhere throughout the United States to the extent of about five to six thousand pistons per month. That he is also informed and believes that Thompson Products, Inc., is also manufacturing and selling pistons of that character at Cleveland, Ohio, and is selling the same elsewhere in the United States for replacement in Ford Model A automobiles.

That Sterling Aluminum Products, Inc. (formerly Sterling Products Corporation) has defended the above-entitled causes at its expense and through its counsel to the knowledge of Respondent. That said Sterling Aluminum Products, Inc. (formerly Sterling Products Corporation) is the plaintiff in a cause now pending in the United States District Court at Cleveland, Ohio, in which Respondent has filed a counterclaim for infringement of a number of patents including the Jardine patent No. 1,768,523 because of the manufacture and sale by said Sterling Aluminum Products, Inc. (formerly Sterling Products Corporation) of pistons of the construction of Exhibit 1 in this cause.

That Sterling Aluminum Products, Inc., was informed of the decision of the Circuit Court of Appeals of October 8, 1937, in the above-entitled cause by its counsel, and that thereafter, in deference to the decision of said Court, further manufacture and sale of pistons of the character of Exhibit 1 in this cause were stopped and has not been re-

sumed; and it is not the intention of said Sterling Aluminum Products, Inc. (formerly Sterling Products Corporation) to resume the manufacture and sale of the same until and unless the decision and decree of the Circuit Court of Appeals is reversed by this Court.

Sgd. Horace Duncan.

Sworn to and subscribed to before me this 18 day of October, 1940.

My commission expires Nov. 25, 1942.

Helen S. Bohne,
Notary Public.

BLANK PAGE

TABLE OF CONTENTS.

	Page
The Question is One of Claim Construction and Not One of Abandonment	2
File Wrapper Estoppel	2
The Features Now Stressed Do Not Materially (Patentably) Distinguish the Jardine Patent Claims from those Lost in Interference	5
Feature b	5
Feature a	6
The Practice in Interferences	7
Interferences with Gulick	9
Jardine Was Not Entitled to the Claims of the Patent	10
The Affidavits of Watts and Robinson Do Not Warrant a Different Decision Nor a Remand	12
Respondent's Shifting Position in this Case	13
Additional Contentions in Respondents' Petition for Rehearing	17
Feature c	17
Feature d	18
Feature e	18
Relative Breadth of Claims	21
The Hartog Patent	21
Distinction in Terminology	21
A Claim as a Composite Unit	22
Jardine Did Not Urge Inventorship	23
1/1000th of an Inch Clearance	24
Mistakes in Opinion	24
Conclusion	25
Appendix	29

Cases Cited.

Altoona Theatre v. Tri-Ergon Corp., 294 U. S. 477, 492, 493 ..... 2, 3, 22
American Signal Corp. v. International Roll-Call Systems, Inc., 110 F. (2) 942 15
Andrews v. Hovey, 124 U. S. 694, 716 11
Berry v. Bohn Aluminum & Brass Corp., 29 F. Supp. 516, 520 8
Bierce v. Hutchins, 205 U. S. 340, 346 10
Cosper v. Gold and Gold, 1911 C. D. 387 (36 App. D. C. 302) 12
Creed v. Potts, 96 F. (2) 317 13
De Forest Radio Company v. General Electric Co., 283 U. S. 684-5 ..... 5, 6
Hansen v. Slick, 230 F. 627 (C. C. A. 3), l. c. 632 23
Honolulu Corp. v. Halliburton, 306 U. S. 550, 559 13
I. T. S. Rubber Co. v. Essex Rubber Co., 272 U. S. 429, 443 3
In Re Austin, 40 F. (2d) 756, 759, C. C. P. A. 8
In Re Dement, 263 F. 813, App. D. C. 7, 8
In re Karplus, 97 F. (2) 100, 101 (CCPA) 10
In re Prichard, 23 F. (2) 768 (App. D. C.) 10
In re Wasserfallen, 298 F. 826, 828, App. D. C. 8
Macbeth-Evans Co. v. General Electric Co., 246 F. 695, 701 10
Morgan Envelope Co. v. Albany Paper Co., 152 U. S. 425, 429 ..... 3, 4
Ohio & Mississippi Railway Co. v. McCarthy, 96 U. S. 258, 267 15
Textile Machine Works v. Hirsch Co., 302 U. S. 490, 497-8 22
Union Metallic Cartridge Company v. U. S. Cartridge Company, 112 U. S. 624 ..... 3, 4
Westinghouse Co. v. Formica Co., 266 U. S. 343, 348 .. 11
Wm. B. Scaife & Sons v. Fall City Woolen Mills Company, 209 F. 210, 213 3

IN THE

SUPREME COURT OF THE UNITED STATES.

OCTOBER TERM, 1940.

No. 9.

SCHRIBER-SCHROTH COMPANY,

vs. Petitioner,

THE CLEVELAND TRUST COMPANY,
CHRYSLER CORPORATION,

Respondents.

No. 10.

ABERDEEN MOTOR SUPPLY COMPANY,

vs. Petitioner,

THE CLEVELAND TRUST COMPANY,
CHRYSLER CORPORATION,

Respondents.

No. 11.

F. E. ROWE SALES COMPANY,

vs. Petitioner,

THE CLEVELAND TRUST COMPANY,
CHRYSLER CORPORATION,

Respondents.

PETITIONERS' REPLY

To Plaintiffs' (Respondents') Motions to Remand and to Respondents' Petition for Rehearing.

This reply is to Respondent's Motions to Remand as well as to Respondent's Petition for Rehearing, because the Petition for Rehearing argues matters included in and in addition to those argued in Respondent's Motion to Remand.

THE QUESTION IS ONE OF CLAIM CONSTRUCTION AND NOT OF ABANDONMENT.

The question here is not one of abandonment of an invention of which notice must be given or pleaded in the Answer under R. S. 4920, Fifth (35 U. S. C. 69), but the question here is one of claim construction as affected by file wrapper estoppel, of which no notice need be given or pleaded.* While, therefore, this court used the expression, "abandoned claim" (p. 5), as we understand it, the basis of this Court's decision was that Jardine having "surrendered," "flexible" webs as a "feature" of the patented piston, as distinguishing from the prior art, Respondent cannot now contend that such is the distinguishing feature, nor that the claims should be construed as describing flexible webs.**

File wrapper estoppel simply means that where, during the prosecution of an application, the applicant and the Patent Office have agreed upon a claim to which the applicant is to be entitled, the patent owner will not, after the issue of the patent, consummating such an agreement, be permitted to change the scope of that claim in order to make out a case of either infringement or validity, by respectively broadening or narrowing the claim to suit the exigencies of

---

*This was really covered by the Answer, for after paragraph 14 of the Bill (R. 8) had alleged that Jardine's alleged invention "had not been abandoned to the public," paragraph 14 of the Answer (R. 17), in response thereto, denied that "the statutory prerequisites had been complied with as alleged"; paragraphs 32 and 33 of the Answer (R. 23) alleged file wrapper estoppel and lack of disclaimer.

**This court has sometimes referred to a file wrapper estoppel as amounting to a "disclaimer" (p. 8), and sometimes referred to a claim to which a disclaimer had been entered as an "abandoned claim." Altoona v. Tri-Ergon, 294 U. S. 477, 492.

This Court's expressions are, for the convenience of this court, listed as follows: p. 5, "the flexible web feature," "claims pointing to flexible webs as a feature of his invention—later surrendered"; p. 7, "claims specifying flexing webs or their equivalents as a feature of the invention"; p. 8, "the surrendered flexible web feature of the patented combination," "the surrender of the former particularizing the flexible web feature of the alleged invention," "if the flexible web feature had not been surrendered."

Note: Emphasis in quoted parts throughout this brief is ours.

the case. This is illustrated by the following decisions, all of which, except one, were cited in this court's opinion (p. 8).

I. T. S. Rubber Co. v. Essex Rubber Co., 272 U. S. 429, 443, was a case where the patentee was not allowed to broaden his claim over one previously rejected and canceled or amended, even though the limitation was not contained in one of the claims in suit, but was understood to be included by the applicant and the Patent Office.

Wm. B. Scaife & Sons v. Fall City Woolen Mills Company, 209 F. 210, 213, was a case where the limitation was included in another claim, but not in the claim in suit, and, therefore, it was held that such limitation could not be read into the claim in suit.

Morgan Envelope Co. v. Albany Paper Co., 152 U. S. 425, 429, was a case where the claim as originally presented contained the expression "substantially as described," but such expression was thereafter taken out of the claim. This court held that the claim could not thereafter be narrowed in court to the thing shown and described in the specification and drawings, in order to save it from invalidity. That case was cited with approval by this court in Altoona Theatre v. Tri-Ergon, 294 U. S. 477, 492.

Altoona Theatre v. Tri-Ergon Corp., 294 U. S. 477, 492, 493, was a case where a disclaimer had been entered to a claim, and even though this court held the disclaimer an improper and invalid disclaimer, it was nevertheless held by this court that the disclaimer could not be disregarded "to permit the abandoned claim to be revived."

Union Metallic Cartridge Company v. U. S. Cartridge Company, 112 U. S. 624 (not cited here, but cited with ap-

proval by this court in the Morgan-Albany case, as well as in the Altoona-Tri-Ergon case), was a case where the patentee had disclosed a cartridge loading machine, which embodied specifically a movable bunter and a stationary die. In a reissue of the patent, the patentee added a sentence to the specification which described the reverse arrangement, to wit: a movable die and a stationary bunter, as an alternative. A disclaimer was thereupon entered to the reissue patent, disclaiming "the movable die E as being the invention" of the patentee. The disclaimer did not make any specific change in the language of the claim, and it was not directed at any claim, but merely to the subject matter of the movable die. This court said:

> "The effect of the disclaimer was to limit the claims of the reissue to a machine with a stationary die E, shown in the original patent and drawings, and to prevent their any longer covering, even if they had before covered, a movable die E or bunter" (l. c. 643).

All of these cases illustrate the view of this court, that while ordinarily the claims of a patent are to be read or interpreted in the light of the specification, nevertheless the file wrapper history must always be considered to determine what was agreed upon between the applicant and the Patent Office, as claimed by the patent. Here it is clear from the file wrapper of the Jardine patent, as contained in this Record (R. 747-844), that flexible webs were intended to be excluded as limitations or restrictions from the claims of the Jardine patent, and that the claims were put forward to the public and to any defendant in any infringement suit, including these defendants, as not restricted to webs which were flexible.

The above cited decisions demonstrate that a patentee, who during the prosecution of his application before the Patent Office, deleted all claim reference to a given feature as patentably distinguishing his alleged invention from

the prior art, is just as definitely estopped from thereafter contending that in such feature rests the patentable distinction as, in the more usual case, he is estopped from contending that an added restriction should be disregarded.

THE FEATURES NOW STRESSED DO NOT MATERIALLY (PATENTABLY) DISTINGUISH THE JARDINE PATENT CLAIMS FROM THOSE LOST IN THE INTERFERENCES.

Respondent's counsel, in the Motion and in the Petition for Rehearing, seek to overcome the force of the file wrapper estoppel by contending that claims 1, 8 and 11 of the Jardine patent in suit distinguish from the claims which Jardine lost in interference, and particularly claim 18 (19E) taken as an example by this court, by the following:

(a) "retraction of the skirt from the bosses" and
(b) "balanced skirt flexibility."*

Such contention is made, although as found by this court (p. 9) neither of these restrictions is found in claims 1, 8 and 11, or constitutes a "material difference" (p. 7).

As to (b), "balanced skirt flexibility," this is certainly more apparent in claim 18 (19E), with its description of "skirt carriers * * * susceptible of being slightly **flexed** radially," than it is in claim 8 of the Jardine patent, which simply mentions "oppositely disposed webs." Furthermore, "balanced skirt flexibility" is simply a description of the result or mode of operation of a piston having flexing webs, which, as a feature, was surrendered with the flexing web feature, apart from the fact that it cannot be patented because, as this court said in De Forest Radio

*Three additional features are put forward in the Petition for Rehearing and these will be discussed later under (c), (d) and (e).

Company v. General Electric Co., 283 U. S. 684-5, cited in Petitioners' Brief (dated August 31, 1940, p. 46):

> "It is method and device which may be patented and not the scientific explanation of their operation."

As to feature (a),* we do not find that wording in any of the claims 1, 8 and 11. Claim 1 specifies "a skirt integral with said webs relieved adjacent said webs," which, in simple language, is a **"relief"** or depressed part in the regions of the bosses; indeed, it is so defined in Respondent's Petition for Rehearing (p. 6). But a relief was used in every trunk piston from the very beginning. It is described in the Franquist patent, illustrated in Petitioners' Brief, dated August 31, 1940 (p. 10). As a dashed-in relief, it is shown in the Schmiedeknecht patent as in Exhibit 1 (same Petitioners' Brief, p. 15); also in the Ricardo patent exactly as in the Jardine patent (same Petitioners' Brief, p. 11). It was in all of the Long pistons, and it was in all pistons from the very beginning.**

That the Court of Appeals found the distinguishing feature of the Jardine patent to reside in web flexibility and not in feature (a), "retraction of the skirt from the bosses," is clear from its second decision (p. 9, quoted by this court, p. 9), where, in holding invalid the Schmiedeknecht patent, which had that feature (see illustration, same Petitioners' Brief, p. 15), that court said:

> "It discloses no web flexibility co-operating with other elements of resiliency to achieve the balanced flexibility perceived in Jardine on the basis of which **alone** the latter is thought to be valid, and we sense

*The Court of Appeals' expression, quoted by this Court, page 8, was "flexing webs supporting retracted bosses and connected to a skirt."

**Chadwick testified (R. 139), "it has been done ever since I knew anything about gasoline engines," which was "about 1909." Respondent's witness, Burns, testified (R. 303), "you had to put a relief in there." Stellman testified, "those reliefs were in general use in 1915" (R. 263). Respondent's witness, Jeffries, admitted that pistons were relieved in the regions of the pin bosses as early as 1917 (R. 327).

no advance in Schmiedeknecht that distinguishes it from the prior art in aspects beyond the skill of the art. It does not invalidate Jardine and is itself invalid."

That is also clear from the second decision of the Court of Appeals (p. 9), holding the Maynard patent invalid as not "marking inventive step over prior art"; although that patent disclosed "retraction of the skirt from the bosses", and additionally separation of the thrust faces from the head, vertical slitting of one of the thrust faces, and attachment of the webs to a head flange provided with ring grooves, all as in Exhibit 1 (see illustrations, same Petitioners' Brief, p. 15).

This court said (p. 7) in comparing the claims:

"The only **material** difference in view of what has been said to be the invention is the statement in the withdrawn claims that the skirt carriers (webs) are 'susceptible of being slightly flexed radially' or the like."

The Practice in Interferences.

Respondent's counsel seek to treat a claim in an interference as if it was merely a collection of words rather than a description of something tangible. That is, however, not only contrary to common sense, but contrary to the decisions of the courts. In Re Dement, 263 F. 813, App. D. C., contains the following statement:

"The issue in an interference is not merely a claim which is distinct and separable from other claims which are or may be made on the same disclosure. The contest is over an **embodied invention, not a technical claim**" (l. c. 816).

There can be no doubt but that if Jardine had prevailed on the claims in interference he would have contended that "balanced skirt flexibility" and "retraction of skirt from the bosses" (that is, a relief whether a simple relief as in the Franquist patent or a dashed-in relief as in the Schmiedeknecht patent), should be read into the claims. As stated above, and as shown by the witnesses, such reliefs were in every piston from the beginning. It, therefore, follows that anyone skilled in the art would read such reliefs into the Long and Spillman disclosures, even if not shown or described, for in Honolulu v. Halliburton, 306 U. S. 550, 559, where such a situation arose, this court decided that the use of an old expedient "is necessarily implied from the language of the Franklin patent. Detailed description is not necessary."*

In the Dement case the situation was somewhat analogous, because after the interference had been terminated Dement sought to obtain claims of different scope, but the court says (263 F. 816):

> "The thing adjudicated was no doubt a thing different from the invention now claimed; but it was different only in scope of definition, as a simple pump differs from a double-acting pump."**

The difference between the claims which Jardine lost and the claims of the patent is not even as much as between a simple and a double-acting pump, because all pistons had reliefs in the regions of the bosses long before Jardine filed, and indeed before Gulick, Long and other parties to the interferences filed.

---

*A recent decision by Judge Tuttle held that a relief on a piston, secured by cam grinding, should be read into a piston patent, even though it did not describe it. Berry v. Bohn Aluminum & Brass Corp., 29 F. Supp. 516, 520.

**That decision has been followed in later cases In re Wasserfallen, 298 F. 826, 828, App. D. C.; In Re Austin, 40 F. (2d) 756, 759, C. C. P. A.

Interferences With Gulick.

Not only was Jardine in interference with Long, Spillman and Hartog, but also with Gulick, on claims listed in Petitioners' Brief (p. 7), dated August 31, 1940, and claims 15 (16E) and 19 (20E), of the Jardine application, but lost in interferences, are claims 29 and 31 of the Gulick patent (R. 534). Gulick's claim 31 describes the Jardine piston, and claim 39 (quoted by this court, p. 2) and claim 18 (R. 532), cited by this court (p. 2), are detail descriptions of the Jardine piston. The Court of Appeals in its first decision (p. 5), described the Gulick piston in part as follows:

> "The wrist pin bosses are pulled inwardly from the skirt periphery and instead of being supported by the skirt are carried from the piston head by depending flanges, thus providing a vertically rigid support for the bosses with freedom of lateral motion in a direction at right angles to the load thrusts on the piston. The surface of the skirt where the bosses are connected to the head in conventional pistons was cut away or relieved, so that the bosses are not directly constrained by the cylinder wall."

Further, in distinguishing Jardine from Gulick, the Court of Appeals said (First Dec. p. 10):

> "He cut away all the skirt portions at the webs, extending the latter to nearly the length of the skirt parts or slippers."

As we showed in Petitioners' Brief (pp. 36-7), this was merely a step backwards in the art, in the direction of Ricardo and even Schmiedeknecht, as related to Exhibit 1 (Petitioners' Brief, p. 15).

It is, therefore, apparent that feature (a), "retraction of the skirt from the bosses," even to the extent of cutting away the skirt to produce a slipper piston, could not be a feature distinguishing the Jardine patent; and, as shown

above, feature (b), "balanced skirt flexibility," was found in all of the claims which Jardine lost in the interferences.

JARDINE WAS NOT ENTITLED TO THE CLAIMS OF THE PATENT.

It was well-settled law, at least as early as 1927, that an applicant, who had lost a claim in an interference, was not entitled to a claim which did not distinguish patentably from such the claim lost in interferences; In re Prichard, 23 F. (2) 768 (App. D. C.); and that a claim is not patentable over a claim lost in an interference, even if it contains limitations not found in the lost claim, unless it involves invention over the lost claim, and even over the structures of the prevailing applicants. In re Karplus, 97 F. (2) 100, 101 (CCPA).

The rule of election* also applies here, particularly with reference to the Gulick and Hartog patents, both of which issued to Respondent; the Gulick application was assigned before the interferences, while the Hartog application was apparently assigned later. Respondent elected to put the claims into the Gulick application, even the specific claim 18 (referred to in this Court's decision herein, p. 4), and claim 12,** which reads so much like claims 1, 8 and 11 of the Jardine patent, that it is difficult to distinguish them. The fact that all patents (Gulick, Hartog and Jardine) ended up in a common pool cannot help Respondent; and we have seen in this case the practice of Respondent of

*The rule of election was applied to a patent case involving a question of abandonment. Macbeth-Evans Co. v. General Electric Co., 246 F. 695, 701, citing Bierce v. Hutchins, 205 U. S. 340, 346.

**"12. A Piston comprising a head portion, a skirt portion, two separated pin bosses, connecting flanges in the zone of the bosses and extending from the bosses to the skirt on both sides of the bosses, connecting means from each of the bosses to the head portion, the skirt portion being entirely separated from the head portion except through the boss connections, and the skirt portion being split longitudinally of the piston to permit free expansion and contraction and the skirt portion being cut away adjacent the outer ends of the piston bosses."

successively renouncing and denouncing the successively expiring Spillman and Moors, Franquist and Schmiedeknecht patents, after they had served their purposes in suits against the customers of Sterling Products Company for the selling of Exhibit 1.*

Why the Examiner allowed the Jardine claims "does not appear," as this court observed (p. 8). Possibly, after the many interferences, which were conducted before the Examiner of Interferences, the Primary Examiner failed to appreciate the legal situation, which had only been settled a few years before. But whatever was the Examiner's reason for allowing the claims of the Jardine patent, the claims did not set forth a "**material** difference" over the claims which Jardine lost in the interferences, as this Court observed (p. 7). While there is a presumption of validity raised by the grant of a patent, such presumption is not conclusive and may be rebutted; Westinghouse Co. v. Formica Co., 266 U. S. 343, 348; and as this Court said in Andrews v. Hovey, 124 U. S. 694, 716:

> "But patents are often granted with a view of leaving open, to be decided by the courts, questions which the Patent Office does not deem it proper to adjudicate against the applicant by withholding the patent."**

*See Petitioner's Brief of September 17, 1938 (pp. 10 and 11) in Nos. 3, 4 and 5, October, 1938, Term, and Respondent's Brief in the instant case (p. 100).

**"Nor is this a case for the application of the doctrine, that, in cases of ambiguity, the practice adopted by an executive department of the Government in interpreting and administering a statute is to be taken as some evidence of its proper construction. The question before us, as to the validity of a patent, by reason of pre-existing acts or omissions of the inventor, of the character of those involved in the present case, is not a question of executive administration, but is properly a judicial question. Although it may be a question which, to some extent, may come under the cognizance of the Commissioner of Patents, in granting a patent, yet, like all the questions passed upon by him in granting a patent, which are similar in character to the question here involved, his determination thereof, in granting a particular patent, has never been looked upon as concluding the determination of the courts in regard to those questions, respecting such particular patent, and, a fortiori, respecting other patents" (124 U. S., l. c. 716).

THE AFFIDAVITS OF WATTS AND ROBERTSON DO NOT WARRANT A DIFFERENT DECISION NOR A REMAND.

The affidavit of Mr. Watts does not add facts of such a nature as to warrant a different decision, even if we assume all of the facts stated therein to be correct. Mr. Watts' statement that the Long and Spillman patents did not describe and show reliefs in the regions of the wrist pin bosses can make no difference; for anyone in this art would inevitably read such reliefs into their disclosures, and legally it is presumed that that would be done. Assuming that neither the Long nor the Spillman applications in interference disclosed flexible webs, that does not overcome the legal situation that Jardine lost claims in the interferences, including flexible webs, and under the law he was not entitled to reclaim such claims, either as written, or with such variations as did not amount to invention. Moreover, Hartog clearly disclosed flexible webs, as the Court of Appeals found.

The affidavit of Mr. Robertson does not add facts of such a nature as to warrant a different decision, even if we assume all the facts stated therein to be correct, although Robertson only states that he has "examined the drawings of the Long and Spillman applications." The conclusion that the Patent Office, in an interference, would not have read into any piston application such a well-known thing as a relief in the regions of the bosses, is contrary to the decision in Cosper v. Gold and Gold, 1911 C. D. 387 (36 App. D. C. 302), where the Court says (l. c. 395):

> "We attach no importance to the failure to give a representation of the car in connection with the foregoing drawing. It is not necessary to add a drawing of that which was well known to every one whether skilled in the art or not. This reasonable doctrine,

well established in the Patent Office, has been repeatedly sanctioned by this court. (Kilbourn v. Hirner, C. D. 1907 552; 128 O. G. 1689; 20 App. D. C. 54; Hopkins v. Newman, C. D. 1908 395; 134 O. G. 2028; 30 App. D. C. 402, and cases cited.)"

That view has been followed in a late decision of the Court of Customs & Patent Appeals in Creed v. Potts, 96 F. (2) 317. That was the view of this court in Honolulu Corp. v. Halliburton, 306 U. S. 550, 559, supra. Such a view is not contrary to this Court's first decision in this case with reference to the Gulick patent. Such a common relief was not found by the Court of Appeals to be a distinguishing characteristic of the Jardine patent, as the Court of Appeals made clear when disposing of the Schmiedeknecht patent, as previously shown. Accordingly, here we do not have a situation where, as this Court's first decision, 305 U. S. (l. c. 58), "invention depends on emphasis of one quality over the other, as the court below found was the case with the laterally flexible webs in the Gulick device."

The facts stated in the Affidavits of Watts and Robertson, even if given full force and effect, cannot result in a reversal. Questions of validity, patentability and scope of claims are questions of law, involving constructions of the patent statutes; and it is the construction of the statutes which is here involved.

RESPONDENT'S SHIFTING POSITIONS IN THIS CASE.

It is next contended that the defense of abandonment was not pleaded, placed in issue, no evidence submitted, except incidentally, but that the evidence is insufficient; that it was never argued and never decided. As we have, however, shown the question here is not one of abandonment, but of the construction of claims as affected by file

wrapper estoppel, and the record is replete with evidence in the form of the file wrapper and contents of the Jardine application, which is the only evidence pertinent.

While, as noted in Petitioners' Brief (pp. 39 and 41), the Court of Appeals in finally distinguishing from the Hartog patent restricted Jardine's claims to "the bending or flexing of straight ribs (webs) so proportioned as to yield to the thermal expansion of the bosses on the cantilever principle"; such was not the position of Respondent before the District Court, nor before the Court of Appeals to the last ditch, nor before this Court in this case.

It will be seen from the Master's Report (R. 382), there were a number of pistons alleged to infringe the Jardine patent, including Exhibit CCC, as well as Exhibit 1, described by the Master, and the Master listed Jardine's claims 1, 8 and 10 as against Exhibit CCC (R. 361).* Respondent's witness Jeffries described Exhibit CCC (R. 77, 93-4, 334), and contended that Exhibit CCC had the web structure of the Jardine patent. As to Exhibit 1, Respondent's witness, Jeffries, contended that the web extended into the Keystone relief, that is, into the thrust face (67, 88, 326, 345). That did not make Exhibit 1 correspond with the structure that the Court of Appeals found the distinguishing feature of the Jardine patent, i. e., "straight ribs—to yield—on the cantilever principle."**

In Respondent's Main Brief before the Court of Appeals (see Appendix pp. I-V), the following assertions were made, namely: that the web of Exhibit 1 extended into the thrust face (p. 69); that claims 1, 8 and 11 were infringed by Ex-

*Exhibit CCC is illustrated in the Appendix (p. V), as it appeared in Respondent's Brief before the Court of Appeals; the physical exhibit is before this Court.

**The Master's Report further shows (R. 361) that a Ray Day piston, Exhibit 8, was relied on as infringing the Jardine patent. It is shown in the Appendix (p. VI) (taken from Respondent's brief before the Court of Appeals) and is described by the Master (R. 383).

hibit CCC, as well as by Exhibit 1 (p. 75); note particularly the application of the claims to Exhibits 1 and CCC (pp. 186, 191, 194). In Respondent's Main Brief on the second appeal (see Appendix p. VII), web flexibility was not particularly relied upon (p. 39), although Exhibit CCC, as well as Exhibit 1, were relied upon as infringing the Jardine patent (pp. 40 and 50). In Respondent's Reply Brief on the second appeal (Appendix pp. VIII-IX) it was even stated that the Jardine patent claims do not recite flexing webs (pp. 14-15).

Even before this court, preceding this Court's last decision (see Respondent's Brief, pp. 30, 45, 46 and 51), it was contended that the Court of Appeals did not find the distinguishing feature of the Jardine patent to reside in flexible webs; that it was not necessary to so construe the claims to avoid the prior art; and that this is not even essential. Even the Petition for Rehearing states (p. 5) "in this very litigation this Court has affirmed and applied the rule that a limitation cannot be read into a claim."

The fact is that Respondent has changed its position throughout the conduct of this case. This is not permissible; Ohio & Mississippi Railway Co. v. McCarthy, 96 U. S. 258, 267; American Signal Corp. v. International Roll-Call Systems, Inc., 110 F. (2) 942. In the last cited case Judge Dobie's language is particularly pertinent here when he said:

> "Plaintiff here, we think, is upon the horns of an embarrassing dilemma. If these claims be very broadly construed (which plaintiff's counsel at first asked in oral argument), then we think the patents in suit would be invalid under the prior art as manifested in the Bobson patents. If these claims be rather narrowly construed (which we think is proper), then we are convinced that the differences between the devices of plaintiff and the devices of defendants

are so many in number and so striking in character that there is no infringement * * *."

With such positions taken by Respondents before the Master, the District Court and the Circuit Court of Appeals and even before this Court, it comes with bad grace for Respondents' counsel to now ask this court to remand this cause, because Respondents have not introduced sufficient evidence to support a shifted position.

The Master specifically discussed Jardine with reference to Long and the Interference in which Jardine was involved with Long (R. 428).

The Appendix further shows that before the Circuit Court of Appeals Petitioners argued the very question presented in the Writ for Certiorari; see Petitioners' Supplemental Brief (pp. 4, 25-29, 44-45), reproduced in the Appendix (pp. IX-XIII).

There was no shift in position on the part of Petitioners, for the claims of the Jardine patent, as drawn, were fully anticipated by the prior art. It was not incumbent upon Petitioners to meet a possible shift of position after a contention to the last ditch on the part of Respondent, that things like Exhibits 1 and CCC were infringements, that web flexibility need not be read into the Jardine patent, and that the claims were valid without that. Furthermore, any Appellate Court can decide a cause upon a different ground than decided by the lower court.

It is, therefore, respectfully submitted that there is no ground stated in Respondents' Motion to Remand these causes to the trial court, to either adduce additional evidence or to rule upon any question, to warrant a remand. The evidence is before this court in the form of the file wrapper and contents of the Jardine patent, and the addi-

tional facts set forth in the affidavits of Watts and Robertson cannot result in a different decision.

ADDITIONAL CONTENTIONS IN RESPONDENT'S PETITION FOR REHEARING.

In addition to the features put forward by Respondents in their Motion as distinguishing the Jardine patent claims from interference claim 18 (19E); i. e.,

(a) "retraction of the skirt from the bosses,"

(b) "balanced skirt flexibility,"

which were repeated in the Petition for Rehearing, three additional features are now put forward, which, for convenience, will be designated as follows:

c. **Two** circumferential slits separating the head from the skirt.

d. A longitudinal slit between the ends of the webs and in or **near the center** of the thrust face of the piston.

e. Attachment of the webs to the **head flange** carrying the ring grooves.

(c) **Two circumferential slits** separating the head from the skirt are also stressed in Respondent's Petition (p. 21) as distinguishing the Jardine claims from interference claim 18 (19E). Curiously, the piston of the Maynard patent put forward as being a Jardine piston and originally alleged to have been copied by Exhibit 1, describes this as "a groove E, which extends completely around the same," and this is claimed as "a continuous annular groove" (R. 547, lines 50, 101). In the Ray Day piston (see Appendix p. VI), alleged to infringe the Jardine patent (R. 361), the slit was continuous.

Apart from the fact that Respondent has thus shifted its position, not only were two circumferential slits de-

scribed in the Long patent 1,872,772 (R. 717), but they are found in the Long commercial pistons, to say nothing of Franquist (R. 699), Ricardo (R. 704), and Pomeroy (R. 733). Surely that was not a material difference from a patentable standpoint, when it was such a common feature, and there can be no doubt that if Jardine had prevailed in the interferences, Respondent would have contended that the continuous slits or grooves of Spillman and of Gulick were within the Jardine patent claims. Of course, that feature was brought up for the first time in the Petition for Rehearing.

(d) **A longitudinal slit** between the ends of the webs and "in or near the **center** of the thrust face of the piston" is also stressed in Respondent's Petition for Rehearing (p. 22) as a feature distinguishing from interference claim 18 (19E), although such wording does not appear in the claims; indeed, Respondent's witness testified that such a feature was not material (R. 69-70).* The Long patent and the Long commercial pistons all showed this feature, as also did Gulick. The language of claim 1 of the Jardine patent is really found in claim 18 of the Gulick patent (R. 532). The Jardine patent does not stress where the vertical slit should be, and it shows it inclined, with the top nearer one web than the other. Again, that feature can constitute no material difference from a patentable standpoint, and, again, this was brought up for the first time in the Petition for Rehearing.

(e) **Attachment of the webs to the head flange** of a piston, which flange is provided with ring grooves, is also stressed in Respondent's Petition for Rehearing (pp. 19-21) as a feature distinguishing the claims of the Jardine patent from interference claim 18 (19E), although that feature is only found in claims 8 and 11.

---

*"A. Whether it is exactly in the center or not I think makes much less difference than it does whether it may be opposite the wrist pin bosses; that is, the slot should be between the wrist pin bosses."

In Sheet 2 of the Jardine patent (R. 540) the webs 6 extend directly up to the head inside of the ring flange, and there are cross ribs 9 connecting these webs with the flange, as shown in Figure 3. It is not clear what the construction of sheet 2 is, although there are cross ribs 29a in Figure 7 corresponding to the cross ribs 9 of Figure 3. What is meant by the statement in claim 11 "webs integral with the flange extending **convergingly inward** of the piston from the opposite portions of the flange" is not clear, since there is no description of that in the specification, pointing by a reference character to the drawing, unless it is meant that the webs are spaced from the inside of the ring flange as in Gulick.

While in the Hartog patent (R. 726) the flange 12 is not connected to the head flange by a rib, and while the piston head has a short flange not provided with ring grooves, there is a ring 20, shown in Figure 5 and also in Figure 2, for entering the circumferential slot 16 between the head and the skirt. It was, however, common to provide the piston head with a depending flange; that is shown not only in the Gulick patent, in interference with Jardine, but also in the Long patent and pistons.

The Gulick piston (R. 529, Figure 2) not only has a ring flange but also has ribs corresponding to the ribs 9 and 27a of Jardine, although these ribs do not extend completely up to the ring-carrying flange on the head. Claim 31 of the Gulick patent, which was claim 19 (20E), lost by Jardine in the Interference, specifies "a piston having a head with top and **side walls**, in combination with a guide structure connected thereto."

In the Schmiedeknecht patent (R. 551) webs are joined to the head through the medium of the bosses. In the Franquist patent (R. 699) the skirt is left connected to the ring flange in the regions of the bosses.

The Pomeroy patent, No. 1,499,073 (R. 733), appears to have exact construction of the Jardine piston in this respect, as shown in Figure 1, and the Specification specifically describes (R. 733, lines 84-89):

> "a pair of webs 6, 6 which join the slippers and bosses together and extend upward and merge with the crown and side wall of the head section of the piston, the entire piston being cast in one."

The "side wall of the head section" is referred to in line 78 by the reference numeral 1^b, which is what the Jardine claims call a "cylindrical ring flange." It will further be noted that in this Pomeroy patent the webs are yielding webs, as specifically described by Pomeroy (R. 734, line 19). This Pomeroy patent not only has a filing date prior to the date of Jardine, but Pomeroy's work preceded Jardine, as admitted by Respondent's witness, Jeffries (R. 84-6), who also admitted that the Pomeroy piston was not only actually made, that it had flexible webs, that it was cast in a permanent mold, but also that the overhang of the flange, with reference to the web, was eliminated. The Pomeroy application was in Interference with Hartog on a claim including flexible webs, as noted in the Record (R. 746).*

This is, therefore, another instance where Respondent relies upon a feature not enumerated in claim 18 (19E), although that feature was in practically every piston prior to Jardine, as were the reliefs in the regions of the wrist pin bosses. Finally it was claim 19 (20E), which Jardine lost in Interference with Gulick and that claim appears in the Gulick patent, and the disclosure of Gulick is as pertinent as the disclosure of Jardine.

---

*This claim was copied by Jardine as claim 15 (16E) (R. 789); that claim was involved in Jardine's interference with Gulick, Long and Hartog (Petitioner's Brief, p. 7); after an adverse decision this claim was cancelled by Jardine (R. 834) and appears as claim 29 of the Gulick patent (R. 534).

Relative breadth of claims of the Jardine patent and the claims which Jardine lost in interference is stressed in Respondent's Petition for Rehearing (pp. 16, 25), although the features stressed are not in the Jardine patent claims, as this court found (p. 9). However, the interference claim did have a foundation for "balanced skirt flexibility" in the statement "susceptible of being slightly flexed radially," and in that respect was more specific than the claims of the Jardine patent. As to the feature of "retraction of the skirt from the bosses," Respondent's petition (p. 6) admits that difference is just a "relief," which, as we have shown, was not only old, but ancient, so that the claims of the Jardine patent could not be considered more specific patentably in that respect.

The Hartog patent is discussed in Respondent's Petition for Rehearing (pp. 9, 10, 11 and 12). The contention that the expression in the interference claim 19E "skirt carriers . . . susceptible of being slightly flexed radially" is not applicable to Jardine's webs is rather late, apart from the fact that "radially" obviously means on some radius by the swinging of the web at its point of attachment which, in Hartog, as well as in Jardine, is at the point of support of the web. Reference to Hartog's Figure 1 shows that the web is mounted to flex as a cantilever from its point of attachment to the part attached to the head.

A distinction in terminology is sought to be made between "ribs," "arms," "webs" and "skirt carriers" as used in the various claims in the interferences, the expression in claim 18 (19E), selected by this court, being "skirt carriers." It is then sought to apply to the web, as used in the Jardine patent claims, a specific meaning; indeed, it is intimated in the Petition (p. 15), that the webs should be limited to that "shown and described," although ap-

parently still insisting that Exhibit 1 should come within the Jardine patent. Here we again have a shift in position. The contention before the Master and through the Circuit Court of Appeals on both appeals was not only that the Jardine patent was infringed by Exhibit 1, assuming the end of the web curved and with the web proper an eighth of an inch long, but that Exhibit CCC, which was simply a trunk piston with reliefs giving curved faces, was also infringed.*

A claim as a composite unit is stressed in Respondent's Petition for Rehearing, as if there were something magical about a combination claim. That is not true for, under the law, a combination must involve invention. A case practically on all fours with this case is the recent decision of this court in Textile Machine Works v. Hirsch Co., 302 U. S. 490, 497-8, where this court says:

> "The addition of a new and useful element to an old combination may be patentable; but the addition must be the result of invention rather than the mere exercise of the skill of the calling, and not one plainly indicated by the prior art. Electric Cable Joint Co. v. Brooklyn Edison Co., 292 U. S. 69, 79, 80; Altoona Publix Theatres v. American Tri-Ergon Corp., 294 U. S. 477, 486."

The Altoona case cited involved the addition of an old expedient, namely, a flywheel, to a talking picture machine in order to secure continuity and uniformity of motion. This court says:

> "The patentees brought together old elements, in a mechanism involving no new principle, to produce an

*Exhibits 1 and CCC are illustrated in the Appendix (p. V) as taken from Respondent's Brief before the Circuit Court of Appeals on the first appeal, together with the claims of the Jardine patent directed to those pistons.

> old result, greater uniformity of motion. However skillfully this was done, and even though there was produced a machine of greater precision and a higher degree of motion-constancy, and hence one more useful in the art, it was still the product of skill, not of invention."

In the Textile Machine Works case this Court refers to the "art of machine design in the knitting machine field," 302 U. S. 498, and in the Altoona case to a "procedure in the field of mechanics and machine design." In Hansen v. Slick, 230 F. 627 (C. C. A. 3), l. c. 632, the Court said: "Invention is what rises to a higher plane than skill, both engineering and mechanical."

Here the various expedients which are put forward as distinguishing the claims of the Jardine patent from the claims which Jardine lost in interference, such as reliefs in the regions of the bosses, two circumferential slits instead of a continuous slit, a vertical slit midway between webs, and connection of the webs to the ring flange, were not only old, but ancient, and would have been applied by any skilled mechanic to a piston covered by the claims which Jardine lost in interference, to say nothing of the various structures disclosed in the other applications. Surely, when Jardine lost those claims it is absurd to say that those skilled in the art were not free to utilize those common expedients.

This Court's statement (p. 7) that "at no time during the prosecution of the Jardine application did he urge that he was the inventor of a piston having flexible webs," but criticized in Respondent's Petition for Rehearing (p. 14), is substantiated by the Record. The file wrapper shows that the original claims (R. 755-8) did not mention flexible webs, so that the original Oath (R. 758) did not support

Respondent's contention. The Supplemental Oaths (R. 766, 772) supported claims not specifying flexible webs. No Supplemental Oath accompanied the claims, including flexible webs (R. 788-790), and which were later put in interference and lost by Jardine. Claims 3-12 of the patent (R. 834-838) did specify flexible webs, but, even so, were not supported by a Supplemental Oath.

1/1000th of an inch clearance is again stressed in Respondent's Petition for Rehearing (p. 8 and elsewhere), as it was in Respondent's Brief before the hearing and at the hearing, although, as pointed out in Petitioners' Reply Brief (p. 11) and at the hearing, there was no evidence that any Jardine piston ever operated commercially or could operate at that clearance. Of course, no reference to any record pages are given in the Petition for Rehearing.

Mistakes in the opinion are referred to in Respondent's Petition for Rehearing (pp. 29-30). As to 1, having reference to page 2 of the opinion, we believe that this can readily be corrected so as to conform with the first opinion by omitting the words "which the court sustained" in the paragraph ahead of the quoted claim, for while claim 39 was not in suit, claim 18 was. As to 2, referring to page 6 of this Court's opinion, there is neither error nor mistake. Claims 5 and 6 actually do contain the statements quoted, while claims 8 and 11 do not. Moreover, as noted in the Master's Report (R. 1096), claims 5 and 6, together with claims 1, 8 and 11, were actually listed as being infringed by Exhibit 1, and claims 1, 8 and 11 were simply selected before the Court of Appeals as typical claims. With reference to page 3 of this Court's opinion, we believe that the insertion of "without prejudice" after "missal," line 4 from the bottom, will clarify the situation. We make these suggestions for the convenience of this Court.

CONCLUSION.

The shifting positions of Respondent during this litigation have been noted. First, Jardine was put forward as covering no less than four pistons, as listed by the Master (R. 361) and described by the Master (R. 381-2), including a piston, Exhibit 1, having a web one-eighth of an inch long, but which Respondent contended should be extended into the thrust face; a plain trunk piston, Exhibit CCC, relieved in the regions of the bosses, the curved side walls of which were put forward as Jardine's webs; and even a Ray Day piston, Exhibit 8, which had an inside connection from the head to the boss.* The Hartog piston is then sought to be excluded, because a part of the web is curved. The Hartog and Pomeroy webs are said to be too flexible, although the Master held (R. 382) the web of Exhibit 1 is stiff as shown in Petitioners' Brief (dated August 31, 1940, p. 26). Where the limit of interpretation should be, with reference to the web, Petitioners' counsel cannot tell from Respondent's argument. Perhaps Respondent wants a court to decide that the web of the Jardine patent is not as flexible as the webs of Hartog or Pomeroy pistons, but is as flexible as is the web of Exhibit 1; or perhaps that the curve from the web of Exhibit 1 extending into the relief is not as much as the curve of the Hartog web. Of course, the situation is here such that reference to the specification will not help to determine either validity or infringement, and the claims simply do not comply with R. S. 4888 and cannot be made to comply therewith.

There is nothing in this Court's opinion which will have a revolutionary effect upon some rule of law or some established procedure, as is intimated in Respondent's Petition

*These are illustrated in the Appendix (pp. V-VI) as presented by Respondents to the Circuit Court of Appeals.

for Rehearing (p. 29). The basis of this Court's decision, as we understand it, is not that claim 8 of the Jardine patent and claim 19E are the same, but that there is no material (patentable) difference between them when both of them are construed in connection with a specification. Surely claim 19E would be more definite in the Jardine specification than claim 8, for claim 8 does not specify web flexibility, while claim 19E does. Such a feature as relief in the regions of the bosses which Respondent's counsel say is in claim 8 and not in claim 19E, would be read by any court into a piston patent, even without reference to a specification, and, of course, that is more so true of balanced flexibility with reference to claim 19E than with reference to claim 8.

The purpose of the Statute, R. S. 4888, is to enable not only courts to construe what a patent covers, but to enable patent counsel to advise clients. The defenses against a patent are generally two, namely, invalidity and non-infringement; as the basis therefor reliance must be had upon the prior art and upon the file wrapper history. The file history, in almost every case, will show an entirely different situation than the patent specification and claims alone will do, for the file history shows what has been surrendered during the prosecution of the application.

The present case is not one where an injustice has been done to Respondent, but the opposite. The Jardine patent was not originally put forward at all in the Patent Office or in this litigation as anything substantial, because both Hartog and Long were prior to Jardine, as was also Gulick. Respondent knowing this, deliberately relied upon the Gulick patent with its early filing date and distorted the description (by amendment) to eliminate both Hartog and Long. Now that this distortion has been disapproved by this court, Respondent cannot complain if the situation,

which itself has created, turns to be unfavorable to Respondent. Furthermore, as shown in Petitioner's Brief, by no twisting of Jardine's claims can these claims be held valid and still be infringed by Exhibit 1.

It is therefore respectfully submitted that Respondent's motion to remand and Respondent's petition for rehearing should be denied.

Respectfully submitted,

JOHN H. BRUNINGA,
JOHN H. SUTHERLAND,
Attorneys for Petitioners.

St. Louis,
January 15, 1941.

BLANK PAGE

APPENDIX.

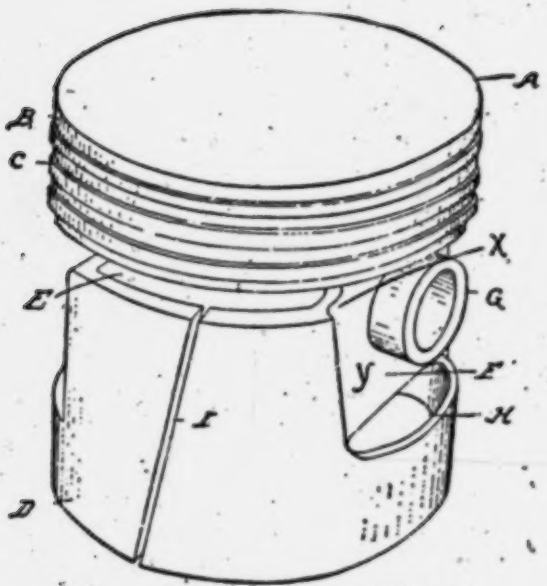


Fig. 1 (Maynard Piston)

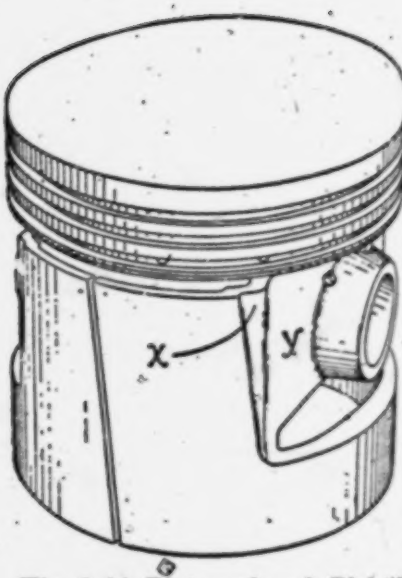


Fig. 2 (A Piston of each Plaintiff and Defendants)

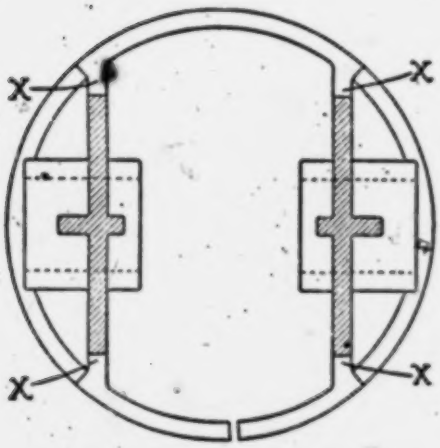


Fig. 3 (Maynard Piston)

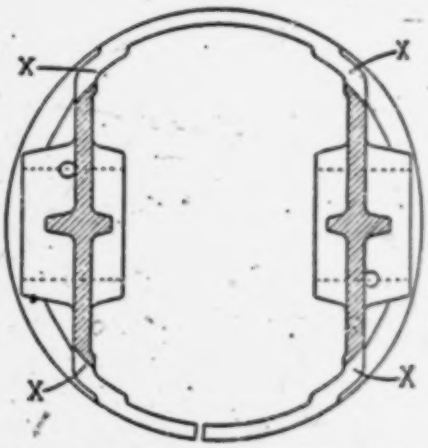


Fig. 4 (A Piston of each Plaintiff and Defendants)

APPENDIX.

MAIN BRIEF FOR APPELLANTS.

Page 69:

The first piston thus duplicated was the Maynard piston and as typical of the questions of infringement involved, we submit opposite, as Fig. 1, a drawing from the Maynard patent and Fig. 2, a drawing of defendants' piston Exhibit 1 charged to infringe the Maynard patent.

The undisputed evidence is that the pistons are precisely the same in mode of operation and results, in function and in structure except that the edge X is cut away in defendants' piston due to the fact that plaintiff's licensees had done this long prior to the copying by defendants of plaintiff's licensees' commercial piston. There is no denial of the evidence of our witnesses that operations, functions and results are the same and that structures are identical except for this dulling of the corner at X. (R. pp. 81-84.) Or, looking at it in another way, the only differences between these two are that in Maynard the web is straight from end to end, as shown at X, and in Exhibit 1 this web is slightly curved in at the ends as shown at X in the cross sections opposite, Figs. 3 and 4, which are taken between the bosses and the head of the piston.

Page 74:

Claims in Suit: The example claims in suit to which we referred, *supra*, are as follows:

Gulick: Claims 1, 11, 12, 13, 15, 18, 28, 29, 30 and 33. All but claim 33 were involved in one or more of the interferences to which we have referred. Claims 11, 12, 13, 18, 29 and 30 are limited broadly or narrowly to the webs.

Jardine:	Claims 1, 8 and 11.
Maynard:	Claims 1, 6 and 8.
Mooers:	Claims 4 and 6.
Schmiedeknecht:	Claims 1 and 3.

Page 75:

Exhibit No. 1 with all patents in suit. (R. pp. 80-84.)

Exhibit No. 8 with Gulick, Jardine and Mooers. (R. pp. 85 and 86.)

Exhibit BBB with all patents in suit. (R. pp. 190-191.)

Exhibit CCC with Gulick, Jardine, Maynard and Mooers. (R. pp. 199-201.)

Exhibit 3-J with Gulick. R. pp. 955 and 956.)

Exhibit 3-O with Gulick and Mooers. (R. pp. 956 and 957.)

Page 77:

(4) Defendants' expert admits the presence of the webs in Exhibits BBB, CCC and 3-J. (R. p. 535.) There never was a denial that webs are present in Exhibit 1.

(5) Defendants' expert points out the extension of the keystone relief at X in Fig. 2 and the bending of the ends of the webs there, but admits that a web is still a web when curved from end to end in the admission pointed out in No. 4. This keystone relief, present in Maynard and defendants' pistons, is in none of the claims in suit.

Page 82:

Therefore, the Master was quite wrong in saying that all of the claims in Gulick and Jardine were limited to webs, that any of them were limited to webs flexible throughout, that the defendants' pistons (Except Ex. 3-O) did not have webs, and that the webs which the defendants' pistons do have were nof flexible throughout. There is no evidence in the record to support any of these findings. Every one involving fact is contrary to the testimony of the defendants' expert, as well as the other witnesses testifying on that subject.

Page 186:

Jardine Patent No. 1,763,523:

Claim 1. In a piston for an internal combustion engine, the combination of

Infringed by Exhibits 1 BBB CCC

1. a head (1) having ring grooves (side wall 1[b] of head having packing ring grooves) therein,
2. a plurality of webs (5) integral with said head (1) and having
3. diametrically opposite piston pin bosses (4) therein,
4. a skirt (2)
   a. integral with said webs relieved (relieved area 7) adjacent said webs (5) and
   b. separated from the head (1) by circumferential slots (3) and provided with
   c. a longitudinal slot (8) connecting the lower end of the piston with one of the circumferential slots (3).

Claim 8. In a piston for an internal combustion engine, the combination of

Infringed by Exhibits 1 BBB CCC

1. a head (1) having a cylindrical ring flange (1[b])
2. oppositely disposed webs (5) integral with the flange (1[b]) and carrying diametrically opposite piston pin bosses (4),
3. a skirt (2) integral with said webs (5) and
   a. cut away to expose the sides of said webs (5) and
   b. separated from the ring flange (1[b]) by circumferential slits (3) and
   c. provided with a longitudinal slit (8) disposed between the ends of the webs (5).

Tightly Bound

Page 191:

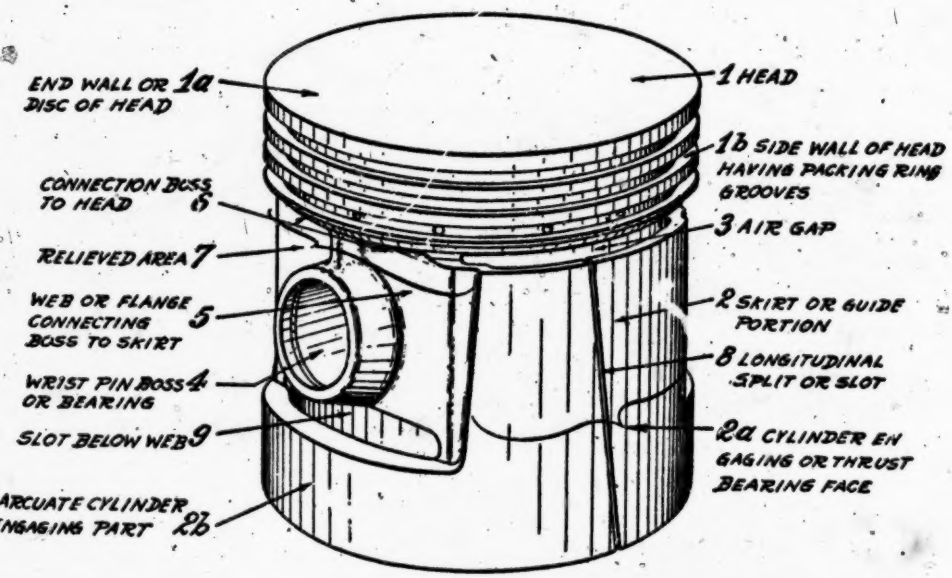


EXHIBIT 1

Page 194:

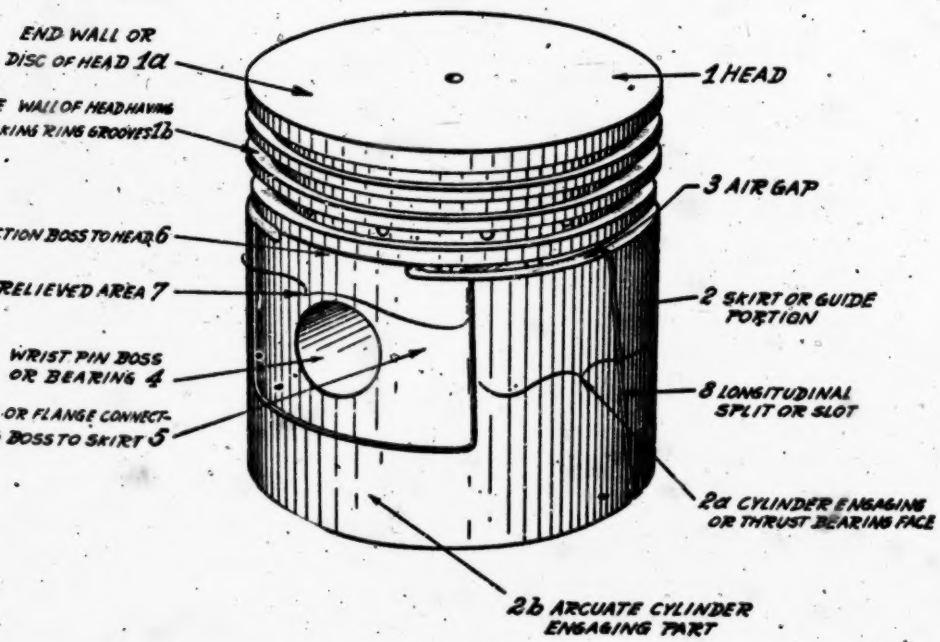


EXHIBIT CCC

Page 197:

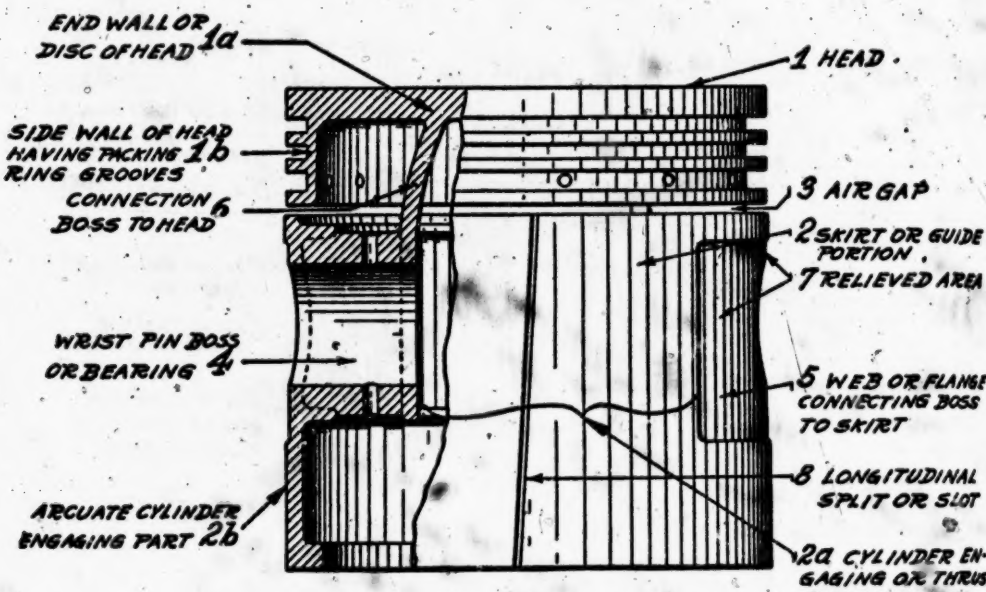


EXHIBIT 8
RAY DAY

MAIN BRIEF FOR APPELLANT ON SECOND APPEAL.

Page 39:

If it were found necessary to construe the webs recited in the Jardine claims as being flexible, there is then ample basis in the Jardine specification description for such a construction under the strictest application of the ruling of the Supreme Court in its opinion of November 7, 1938; authority for so construing claims in light of the specification description is ample (see *Westinghouse v. Quackenbush*, 53 Fed. (2) 632, 634 (C. C. A. 6) and cases cited therein and citing the same). The propriety of so construing a claim where there was support therefor in the disclosure was recognized by the Supreme Court in its opinion in this litigation.

Page 40:

When so construed the claims are infringed by Exhibits 1, BBB and CCC as explained in detail at pages 75 to 78, 186 and 187 in our Main Brief on the first appeal. The evidence shows that these accused pistons operate like and get the same results as the Jardine piston except in degree (R. pp. 80-86, 190, 191 and 199-201). The testimony of the plaintiff's expert on this subject was not only not disputed by the defendant's expert, but insofar as he discussed the question, his testimony is in affirmance.

Page 50:

(c) The Jardine claims are entitled to be construed as containing flexible webs and, as such, are valid as an important improvement invention and entitled to such a scope, particularly in view of the effect of the decision upon the prior art, that they are infringed by Exhibits 1, 8, BBB and CCC, as we have explained at pages 68 to 78 of our Main Brief.

APPELLANT'S REPLY TO SUPPLEMENTAL BRIEF FOR APPELLEES.

Pages 14-15:

The claims do not contain the limitation in the form described as preferable. They do recite the webs. They do not use the word "bending" or "flexible."

It seems elementary for us to have to repeat here that a patentee is not limited to his preferred form, especially when he calls attention to the fact that he is illustrating particular embodiments, although his invention "is applicable to other forms of construction" (R. p. 1296, ll. 120-121) as Jardine does.

It is equally elemental that a structural feature, such as that employed by Jardine to cause the webs in his preferred form to bend at one point more than another, cannot be read into the claims for the reason that additional structure cannot be read into claims.

It is also elemental that as far as an adjective phrase is concerned such as "bending" or "flexible," such terms can be interpreted into claims under the rule that a claim can be construed in the light of the specification not to include structure, but to interpret structure. This Court collected and cited authorities on this subject in *Westinghouse v. Quackenbush*, 53 Fed. (2) 632, 634 and *Richardson v. National*, 63 Fed. (2) 289, 293. Only in case the Court violated these rules and read additional structure into the claims would there be any force to defendants' argument on this score. Even if it were the rule that a patent was limited to the specific embodiments or forms disclosed in the patent the claims would read on the second embodiment shown in Figs. 6 to 8 of the Jardine patent without having to read this particular limitation into them.

Nor is this situation to be confused with what happened in the Supreme Court. The Supreme Court held

that an element could not be read into a claim. For that reason this particular feature of structure cannot be read into the claims. The Supreme Court, however, did not hold that an element already in a claim could not be construed to be flexible in the light of the specification, where that adjective phrase, antithetical or not, *was found in the specification.* It ruled that "flexible" could not be read, as an element, into the claims of the Gulick and Maynard patents because it was not found in the specifications of those patents. Defendant asks the Court here to extend the rule laid down by the Supreme Court that web flexibility could not be read into the Gulick claims as an element, to now say that a claim may not be construed in the light of the specification to interpret the nature of the structure.

SUPPLEMENTAL BRIEF FOR APPELLEES.

Page 4:

The Jardine Patent claims do not specify that the webs are laterally flexible. However, it is appellants' contention that they must be so construed;* in fact the Jardine patent is now said to supersede Gulick.

*Although appellants contend that webs laterally flexible cannot be read into a piston patent (Brief p. 30).

Pages 25-29:

THE JARDINE PATENT.

This court did not pass on either the validity or infringement of this patent for the reason stated (92 F. [2], l. c. 337). This patent is, however, again put forward in Main. Brief for Appellant, the contention being (p. 38) that the disposal of the Gulick patent by the Supreme Court as not disclosing webs laterally flexible

> ". . . leaves Jardine the first to disclose a piston having flexible or bendable webs."

It is even stated (l. c. 44):

> "The patent of Jardine is entitled to be rated as basic and to a wide range of equivalents."

Not only is it contended (p. 40) that the claims of this Jardine patent are infringed by Exhibit 1, but also by Exhibits BBB and CCC, although this court in considering the Gulick patent, which is now said to be superseded by the Jardine patent, said (92 F. [2], l. c. 338):

> ". . . In the remaining accused devices we find no infringement."

The record shows the following, of which more complete citations will appear later:

1. **Jardine was in interferences with Long** on claims which are the prototypes of the specimen claims, and, indeed, on a claim involving webs "resiliently yieldable," or "flexed radially" (R. 2087), and the decisions in these interferences were adverse to Jardine (R. 2068-2099). Not only did the Supreme Court find that the Long pistons were "in commercial use from 1917 on," but that this Long piston was one "whose webs were concededly laterally flexible." We will show that one of plaintiff's witnesses, Burns, admitted that the Long piston (Ex. F) was sold to and in use by Franklin dealers in 1919; and another one of plaintiff's witnesses, Jeffries, knew of this piston (Ex. F) as having been used by Franklin as early as 1920, and that in this piston the webs were laterally flexible.

2. **Jardine was also involved in interferences with Hartog** on a claim involving webs "yieldingly connecting said skirt section with said head," and again the interference was adverse to Jardine (R. 2095; Hartog Cl. 4, R. 1801). The Supreme Court found that after

". . . Hartog, to the knowledge of Gulick's assignee, had specified and claimed a yieldable web, Gulick copied the Hartog claim and amended his specifications . . ."

3. **The claims involved in the interferences with Long and Hartog were canceled by Jardine,** so that it is clear that not only was Jardine not the first to make a piston having webs laterally flexible, but

". . . Whether the Examiner was right or wrong in rejecting the original claim, the court is not to inquire . . . The patentee is thereafter estopped to claim the benefit of his rejected claim or such a construction of his amended claim as would be equivalent thereto . . . he 'may not by construction, or by resort to the doctrine of equivalents, give to the claim the larger scope which it might have had without the amendments which amount to a disclaimer.' . . . " (I. T. S. Rubber Co. v. Essex Rubber Co., 272 U. S. 429, l. c. 443).

The above decision applies, because the judgments in the interferences were followed by the rejection of the claims involved. This principle, however, has been specifically applied to adverse judgments in interferences. Greenawalt v. American Smelting & Refining, 3 F. (2d) 658, 660,* affirmed 10 F. (2d) 98, 99** (C. C. A. 9). Type-

---

*"Whatever is excluded in interference cannot be included in the patent; and whatever thus cannot be included cannot be claimed by construction."

**"The claims which were allowed to the appellant by the Examiner after the decision in the Dwight interference are not entitled to a broad interpretation. The decision of the Commissioner was final, as was also the decision of the Court on the appellant's appeal. The allowance of the appellant's claim thereafter was made in the absence of Dwight or his successors in interest, and those claims, however broad they may be, must inevitably be construed in the light of the prior decisions. In other words, they must all be narrowed by the surrender which the appellant made in the interference proceeding, and in the amendment of his claims thereupon made, and, as so limited, they can only mean that the appellant's apparatus is limited to the use of a tight-fitting cover above the whole of the ore pan."

writers Hilliardized v. Corona Typewriter, 43 F. (2d) 961, 964.***

Furthermore, an adjudication in an interference proceeding acquiesced in by the applicant, finally settles not only the rights of the parties under the issue or counts of the interference, but every question and the rights to every claim which might have been presented and determined in the interference proceedings. In re Wasserfallen (App. D. C.), 298 F. 826, 828; In re Austin, 40 F. (2d) 756, 759 (C. C. P. A.); In re Chase, 71 F. (2d) 178 (C. C. P. A.).

4. Jardine, moreover, was in interference with Gulick, and Gulick prevailed on claims which have now been eliminated by the disclaimer. However, during the interferences plaintiff was the common assignee of Gulick and Jardine, and therefore not only do the above decisions apply, but there also applies the rule that an assignee of two applications by different inventors must decide which claims are to be taken, and, having made such an election, the assignee is estopped thereby. Rule 94 of the Patent Office.* In re Dunbar, 278 F. 334 (App. D. C.).

5. None of the specimen claims 1, 8 and 11 specifies webs laterally flexible, and this is true of all the claims of the patent. Appellant cannot say that the Jardine patent claims should be construed, by reference to the specification, as having flexible or bendable webs be-

---

***"After the interference decision adverse to him, Hilliard succeeded, by cancellation and amendment, in getting his patent allowed with the claims in suit. By his acceptance of that decision he foreclosed himself from claiming a construction giving to him the oblique platen shift of Brooks."

*"Parties owning applications or patents which contain conflicting claims will be required . . . to show cause why these claims shall not be eliminated from all but one of the applications or patents of common ownership."

cause it makes the contrary contention with respect to the Gulick patent (Main Brief for Appellants, p. 30).

6. The claims in issue do not distinguish from the Long patent nor from pistons on the market before Jardine filed. It is true the Examiner allowed them, but apparently this Examiner did not know or realize what was the construction of the Long pistons in commercial use, although this record now shows clearly what their construction was.

We have shown in the General Statement that although the Jardine claims do not specify that the webs are laterally flexible, assuming appellants' position, Exhibit 1 cannot be held to infringe this patent because it does not come within what Jardine specifically states constitutes the metes and bounds of web flexibility, and finally what plaintiff's own witness, Jeffries, places as the metes and bounds.

The history of the Jardine specification and claims and the interferences in which the Jardine application was involved will be further treated in an appendix.

Pages 44-45:

Plaintiff cannot prevail in this case, because

1. The Jardine piston, even as shown in the patent, constitutes a step backwards in the art over the Long pistons.

2. Jardine lost in interferences with both Long and Hartog, and, therefore, cannot claim any construction, either by the application of the rule of equivalents or otherwise, sufficiently broad to cover any of the pistons before this court.

3. Even if there is no disclosure in the Long

patent of a piston having reliefs in the regions of the bosses, and even though that was not in the Long pistons in commercial use, that was an expedient which was put on pistons from the very beginning, and was, therefore, within the purview of those skilled in the art.

4. None of the claims of the Jardine patent specify the webs as laterally flexible, and plaintiff cannot in this case change its position at will and ask this court to now read web flexibility into those claims.

BLANK PAGE

BLANK PAGE

FILE COPY

Office - Supreme Court, U. S.
FILED
JAN 23 1941

IN THE

Supreme Court of the United States

OCTOBER TERM, 1940.

No. 9.

SCHRIBER-SCHROTH COMPANY, *Petitioner*,

v.

THE CLEVELAND TRUST COMPANY, CHRYSLER CORPORATION, *Respondents.*

No. 10.

ABERDEEN MOTOR SUPPLY COMPANY, *Petitioner*,

v.

THE CLEVELAND TRUST COMPANY, CHRYSLER CORPORATION, *Respondents.*

No. 11.

F. E. ROWE SALES COMPANY, *Petitioner*,

v.

THE CLEVELAND TRUST COMPANY, CHRYSLER CORPORATION, *Respondents.*

Rejoinder to Respondents' Reply Brief on the Motions to Remand and the Petition for Rehearing.

JOHN H. BRUNINGA,
JOHN H. SUTHERLAND,
Counsel for Petitioners.

Washington, D. C.
January 23, 1941.

PRESS OF BYRON B. ADAMS, WASHINGTON, D. C.

BLANK PAGE

IN THE

Supreme Court of the United States

OCTOBER TERM, 1940.

No. 9.

SCHRIBER-SCHROTH COMPANY, *Petitioner*,

v.

THE CLEVELAND TRUST COMPANY, CHRYSLER CORPORATION, *Respondents.*

No. 10.

ABERDEEN MOTOR SUPPLY COMPANY, *Petitioner*,

v.

THE CLEVELAND TRUST COMPANY, CHRYSLER CORPORATION, *Respondents.*

No. 11.

F. E. ROWE SALES COMPANY, *Petitioner*,

v.

THE CLEVELAND TRUST COMPANY, CHRYSLER CORPORATION, *Respondents.*

Rejoinder to Respondents' Reply Brief on the Motions to Remand and the Petition for Rehearing.

In desperation to rescue the Jardine patent from invalidity, Respondents retreat, step by step, from their former contention that the structure, fuction and mode of operation of the Jardine patent is the same as the accused device. Now they take refuge behind a new rampart, Figure F, (Brief, pages 7, 8, 10, 11 and 13) asserting that the type

of action there shown and described (puckering or buckling of the web to shorten it) was not and could not have been in the interfering applications or the prior art. Suppose it wasn't, neither is it in the accused device. The web of Exhibit 1 is permanently shortened by the Keystone relief in the skirt. The web of Exhibit 1 does not pucker or buckle, but operates in an entirely different manner, as testified by the expert witnesses on both sides (Exhibit 4-A, R. 685; Jeffries, R. 46, 67, 325-6, 343-345; Stellmann, R. 245).

When it is realized that the horizontal slot in the accused device terminates (as the device shows on its face) at the inside of the ring flange, the following testimony of Respondents' witness would appear to dispose of the case (R. 93):

> "Q. Would you say that the objects and advantages and purposes of the Jardine patent are secured if the slots 29 were shortened to terminate about the inside part of the ring flange 23?
>
> "A. It would be quite difficult to secure successful operation under those conditions."

We point this out simply to show that the result of this litigation would remain the same (dismissal of the Complaint) no matter how many times it is reheard, remanded or reopened; and we think it is the settled rule* that cases will not be reheard or reopened unless a change of result is reasonably in prospect; for otherwise the error, if any, is a harmless one. This is a "case or controversy"; if Respondents have no "case" against Petitioners that ends it, notwithstanding the claim of academic inaccuracy (which does not exist) in the factual niceties of the opinion.

While we believe the for going is a sufficient answer to all of Respondents' contentions, we deem it propitious to cor-

---

*_Treat_ v. _Jemison_, 131 U. S. Appendix cxxxv, 23 L. Ed. 134; _Burley_ v. _Flint_, 105 U. S. 247, l.c. 248, 26 L. Ed. 986; and cases cited 4 C. J. S. 2027 note 63, and 4 C. J. 623 note 15.

rect some impressions made by Respondents' latest brief, lest the Court be misled (references being to pages of Respondents' Reply Brief).

Estoppel, File Wrapper or Interference Record (pp. 2, 3, 16-17). Respondents' attempted distinction between file wrapper and interference record estoppel is of no import. This Court's decision makes no reference to "interference record estoppel". The presentation and cancellation of the claims appears from the file wrapper (R. 747-844). Loss of the interferences is indicated by the notation "Adverse" on pages 791, 794, 797, 799, 802, 805, 807, 810, 812, 814, 823, the rejection (R. 833-834) and the cancellation (R. 834). No reference need be had to an interference record to reveal the surrender of the claims.

Revival of Cancelled Claim (P. 4). The supposed "far cry" difference is only a difference of purpose or intent.

Balanced Skirt Flexibility (pp. 6, 10-11). We stated in our previous brief (page 5) that this is a result. We do not agree with the "proposition" that "it was error to read it into the interference counts". We say, if it is read into one claim, it must likewise be read into the others, which this Court did (Decision, page 9).

Jardine's Relief Was Common (P. 13). In the Petition for Rehearing Respondents took a bold position with reference to "relief", saying page 6: "that was a name—familiar in the art to describe any degree of skirt retraction which might be appropriate to a particular construction". Now Respondents welsh, and say (p. 13): "the relief which Jardine employed (and which was not the common relief) is a distinguishing characteristic of the Jardine patent." Contrary to what Respondents imply, Jardine's precise relief was old in the Pomeroy patent (R. 731) and the Ricardo piston (R. 684). On the other hand the type of relief embodied in the accused device is shown in the Schmiedeknecht patent (R. 551), which the Courts below held invalid.

Pool. The single sentence, commencing bottom page 10 our Reply Brief, cannot justify the innuendo cast at pages 19-20 of Respondents' latest brief.

Supplemental Oath (P. 19). We said nothing of "the law relating to supplemental oaths".

Spillman and Long. Respondents' insistence, throughout the latest Brief that the case be reopened for evidence anent Spillman and Long, is hollow. In our presentation, we assumed, arguendo, the correctness of the statements in the Watt's affidavit and showed, we think, that even so Respondent had no case. We said (page 12), and still say, what Watts said "can make no difference; for anyone in this art would inevitably read such reliefs into their disclosures". Our refutation of Respondents' arguments was not dependent upon reading anything into the Spillman or Long applications.

Patentability. As we understand this Court's decision, it held, in effect, that the allowed claims were unpatentable over the canceled and abandoned claims, because the Circuit Court of Appeals had held the subject matter uninventive *sans* flexible webs—which later "cannot be construed" (Decision, page 9) into the claims.

We submit that the showing made by Respondents justifies neither rehearing, reopening nor remand.

Respectfully submitted,

JOHN H. BRUNINGA,
JOHN H. SUTHERLAND,
Counsel for Petitioners.

Washington, D. C.
January 23, 1941.

BLANK PAGE

BLANK PAGE

FILE COPY

Office - Supreme Court, U. S.
FILED
OCT 19 1940
CHARLES ELMORE CROPLEY
CLERK

SUPREME COURT OF THE UNITED STATES

OCTOBER TERM, 1940

No. 9

THE SCHRIBER-SCHROTH COMPANY,

vs. *Petitioner,*

THE CLEVELAND TRUST COMPANY,
CHRYSLER CORPORATION,

Respondents.

No. 10

THE ABERDEEN MOTOR SUPPLY COMPANY,

vs. *Petitioner,*

THE CLEVELAND TRUST COMPANY,
CHRYSLER CORPORATION,

Respondents.

No. 11

THE F. E. ROWE SALES COMPANY,

vs. *Petitioner,*

THE CLEVELAND TRUST COMPANY,
CHRYSLER CORPORATION,

Respondents.

AFFIDAVIT OF JOHN H. SUTHERLAND IN REPLY TO AFFIDAVIT OF WILLIAM C. McCOY APPENDED TO RESPONDENTS' MEMORANDUM OPPOSING PETITIONERS' APPLICATION FOR A WRIT OF CERTIORARI TO CORRECT DIMINUTION OF THE RECORD.

JOHN H. SUTHERLAND,
Counsel for Petitioners.

BLANK PAGE

SUPREME COURT OF THE UNITED STATES

OCTOBER TERM, 1940

No. 9

THE SCHRIBER-SCHROTH COMPANY,

vs. *Petitioner,*

THE CLEVELAND TRUST COMPANY,
CHRYSLER CORPORATION,

Respondents.

No. 10

THE ABERDEEN MOTOR SUPPLY COMPANY,

vs. *Petitioner,*

THE CLEVELAND TRUST COMPANY,
CHRYSLER CORPORATION,

Respondents.

No. 11

THE F. E. ROWE SALES COMPANY,

vs. *Petitioner,*

THE CLEVELAND TRUST COMPANY,
CHRYSLER CORPORATION,

Respondents.

AFFIDAVIT OF JOHN H. SUTHERLAND IN REPLY TO AFFIDAVIT OF WILLIAM C. McCOY APPENDED TO RESPONDENTS' MEMORANDUM OPPOSING PETITIONERS' APPLICATION FOR A WRIT OF CERTIORARI TO CORRECT DIMINUTION OF THE RECORD.

STATE OF MISSOURI,
City of St. Louis, ss:

JOHN H. SUTHERLAND, being duly sworn, deposes and says that he is of counsel for petitioners; that he has read the

1e

affidavit appended to RESPONDENTS' MEMORANDUM OPPOSING PETITIONERS' APPLICATION FOR A WRIT OF CERTIORARI TO CORRECT DIMINUTION OF THE RECORD; that he recalls having a conference on or about February 21, 1935, with William C. McCoy for the purpose of settling the record for the Court of Appeals in these cases: but does not recall having specifically discussed Exhibit BB at such conference, as stated in the affidavit of William C. McCoy.

Affiant did not "propose" at such conference that Exhibit BB be included in the record, but on the contrary affiant proposed the inclusion of such Exhibit BB in a letter dated December 10, 1934, photostatic copy of affiant's file copy of which is attached hereto; that in a letter dated December 24, 1934, photostatic copy of which is attached, respondents' counsel, William C. McCoy, specifically acquiesced in the request that Exhibit BB be included (see page 2 of said letter). Finally in a letter dated February 25, 1935, respondents' counsel advised petitioner's counsel, as shown by the photostatic copy attached hereto, that "we have redrawn the Praecipe to include all of the exhibits that you insist upon including in the Record, with the exception of the assignments of the patents in suit"; and further "We are also including the many defendant's exhibits that you desire to have incorporated in the Praecipe"; and further "We are doing our best to meet all of your requirements in preparation of this Praecipe and have met all of them except as to the assignments."

Affiant believes that if Exhibit BB had been discussed at the conference on February 21, 1935, and excluded as a result thereof, the portion of the record (pages 671-2), having reference to such exhibit, would have been deleted at the same time.

JOHN H. SUTHERLAND,
Counsel for Petitioners.

Sworn to and subscribed before me this 15th day of October, 1940.

HELEN S. BOHNE,
Notary Public.

[SEAL.]

My Commission expires Nov. 25, 1942.

Receipt of a copy of the foregoing affidavit and copies of the letters attached acknowledged this 16th day of October.

WM. C. McCOY,
Counsel for Respondents.

December 10, 1934.

Mr. Wm. C. McCoy,
Evans & McCoy,
Bulkley Building,
Cleveland, Ohio.

Re: The Cleveland Trust Cases.

Dear Mr. McCoy:

I enclose herewith list of further corrections or revisions in your Narrative Statement of Testimony.

I have also considered your praecipe, as well as your proposed order for withdrawal of physical exhibits.

In addition to those exhibits which are mentioned in the praecipe to form a part of the record, the following should also be included:

Plaintiffs' Exhibits:

2-A, 2-B, 3-A, 3-B, 3-C, 3-D, 4-A, 4-B, 4-C, 4-D, 5-A, 5-B, 5-C, 5-D, 5-E, 6-A, 6-B, 6-C, 23, 25, 26, 29, 33, 35-A to E, inclusive, 38-a to e inclusive, 39-a to e inclusive, 40, *44, *45 and 62.

Defendants' Exhibits:

A, B, C, D, J, K, L, M, O, S, T-1, T-2, T-3, U, W, Y, BB, CC, DD, EE, FF, GG, HH, II, JJ, KK, LL, MM, 3-L, 3-S, 3-U, 4-B, 4-G, 4-I (drawing No. 438 only required), 4-J, 4-K, 4-L-2, 4-L-3, 4-L-4, 4-M, 4-N, 4-O, 4-R, 4-Y, 4-Z, 5-A, 5-B,

5-C, 5-D, 5-E, 5-F-1, 5-F-3 to 12 inclusive, 5-G, 5-H-1, 5-H-2, 5-H-3, Bill of Complaint in Simmons Case No. 3510 (Rec. p. 1015), 5-K-1 to 9 inclusive, 11 and 12, 5-M.

With reference to your Exhibits 43 and 46, I would suggest that instead of making 46 a physical exhibit and 43 a documentary exhibit, that 46 be made the documentary because my recollection is that it is clearer than the photostat 43.

This leaves the following to go up as physical exhibits:

Plaintiffs' Exhibits:

1, 8, 9, 10-A, 12, 14, 17, 20, 24, 30, 31, 34, 47, 48, 49, 58, 59, 60, 61, 71-A and B, 72-A and B, 73, 76, 79, 80, 81, 82, 83.

Defendants' Exhibits:

B, E, F, G, H, I, J-1, N, P, P-1, P-2, Q, R, V-1 to V-7 inclusive, X, AA, GG-1, HH-1, II-1, II-2, JJ-1, NN, AAA, BBB, CCC, EEE, FFF, 3-G, 3-H, 3-I, 3-J, 3-K, 3-M, 3-N, 3-O, 3-P, 3-Q, 3-T, 3-V, 3-W, 5-I, 5-J, 5-L.

With reference to the above mentioned physical exhibits, I think it preferable to incorporate in the praecipe, a request to the Clerk that they be withdrawn from the files of the District Court and transmitted to the Clerk of the Court of Appeals. This will save both sides the trouble of obtaining the exhibits from the Clerk, checking them back and forth and finally packing them for shipment to the Court of Appeals. I think it is the usual practice to let the Clerk of the District Court do all this, and I believe you will agree that that is the best way to handle it in this case. Of course, an order of the District Court permitting the exhibits to be withdrawn from its files for that purpose is essential.

I believe this leaves only Exhibits 10, 18, 19, 27 and 27-A which will not be needed in the Court of Appeals. If you care to redraft the order which you have sent me, embodying the above suggestions, I will be glad to approve it.

I notice in your order for withdrawal of the exhibits, you have included Exhibits 1-Z and 2-Z. My recollection is that these were numbers which were applied to the Gulick records during the taking of depositions. They were marked only for identification and were not admitted in evidence as such. I note also you included Exhibit 67-A as a physi-

cal exhibit, but you will probably recall that that was not received in evidence.

Contrary to your expressed wish, I have had to include the various assignments, license agreements, etc. If the Court of Appeals for the Sixth Circuit will accept, as the Court of Appeals for the Eighth Circuit does, a reduced number of record copies of documentary exhibits, I will be glad to cooperate with you in order to effect as much saving in the cost of this record as is possible. For instance, in the case of file wrappers, the Court of Appeals in this Circuit, will, upon application, grant leave to reproduce them in either five or seven copies rather than the required thirty. If the Court of Appeals for the Sixth Circuit will do this, it will be agreeable to us, as concerns the assignments, license agreements, trust agreements, file wrappers, the various bills of complaint and opinions of the tribunals in the interferences, and, in fact, any of the documentary exhibits (except the patents and publications) which comprise more than two or three pages.

I am sending Mr. Kent a stipulation extending the time for the filing of the praecipe and the lodgment of the narrative one week, in accordance with your letter. He will probably submit this stipulation to you for signature within the next few days and will then file it with the Court. I appreciate your courtesy in allowing us this additional time, and, I am sure, Mr. Bruninga will also.

Yours very truly,

3/A

December 24, 1934.

Mr. J. H. Bruninga,
2119 Railway Exchange Place,
St. Louis, Mo.

Dear Mr. Bruninga,

I have a letter from Mr. Sutherland, dated December 10, 1934, in which I understand that he desires duplication of a great many additional exhibits of both plaintiff and defendant in the printed or supplemental record. Be-

cause of the uncertainty of much of this, I am writing you for further information on it.

The first series of Plaintiff's exhibits, 2-A to 6-C, inclusive, and Exhibit 26, and Defendant's Exhibits 3-U, 5-A and 5-B, are the assignments of the patents in suit and letters and papers dealing with the title of Maynard. The matter of title was completely disposed of by the Master's findings of fact Nos. 2, 9 and 10, together with the conclusions of law Nos. 2, 3, 4, 5 and 9. Furthermore, no holdings were based on the prosecution history of any of the patents in suit except Gulick and Mooers. This makes Exhibits 4L$_2$ to 4L$_4$ superfluous. No exceptions were taken to any of these findings or conclusions and therefore it is not seen wherein any of the assignments, agreements, trust papers or file wrappers (except Gulick and Mooers) are pertinent to the matters raised on the appeal.

Equity Rule 75, paragraph b, provides as to the *evidence* to be included in the record that

> "* * * all parts not essential to the decision of the *questions presented by the appeal* being omitted * * *"

and of course the only matters taken up on appeal are those covered by the exceptions and the writ of errors. Each of the matters that we regard as not essential to matters raised on appeal are marked "*". This was our reason for omitting these exhibits from the printed record.

Plaintiff's Exhibit 23, which you desire to have duplicated, is an enlarged display photostat of the Ray Day piston structure. This obviously is a physical exhibit for use on the easel in the court and should not be duplicated in the printed record.

Since there is no question, apparently, as to the character of piston that was reduced to practice by Gulick in 1911 and again in 1914, and since there is no exception to the evidence as to the structure of these pistons, it would appear unnecessary to duplicate the Randall recollection of the Gulick piston Exhibit 29, Winchester's sketches Exhibits 35a to e inclusive, Exhibit *44, which is a substantial duplication of Exhibit 36, reproduced, or Exhibit

45, which is a blueprint of the standard Excelsior 1911 iron piston.

We already have in evidence Exhibit 51, which has been referred to by both of us as the 1914 type of piston, and therefore it seems unnecessary to reproduce Exhibit 62, which is the corresponding drawing of this 1914 aluminum piston that was before the Patent Office as an exhibit there.

There is no Exhibit 33 in evidence, since this sketch was originally marked for identification as Exhibit 33 (R. 1060) but it was later offered in evidence as Exhibit 62 at page 1478 of the record.

Add the following to the printed record:

Gulick Sketch, Plaintiff's Exhibit 62
Sketches of Long piston made from photostats in court, Defendant's Exhibits A, O, W and Y
Franklin Bulletins, Defendant's Exhibits C, D, H, I and N
Gilbert Casting Cards, Defendant's Exhibits GG to MM, inclusive
Piston Publications, Defendant's Exhibits M. U. 3S, 4G, 4J, 4K, 4M, 4N, 4O, 5C, 5D, 5E and 5M
Silv-O-Lite Circular, Defendant's Exhibit 3-L
Root's superposed on Ebbs, Defendant's Exhibit 4B
Franklin Drawing, Defendant's Exhibit BB
Aluminum Castings Company Drawings, Defendant's Exhibit CC
Royalty Sketches, Defendant's Exhibits DD, EE and FF
Staver Certificate, Defendant's Exhibit 5-G
Chadwick and Franklin Drawings of Long Piston, Defendant's Exhibits S, T_1, T_2, T_3, BB and CC

The following exhibits to be duplicated in typewriter, so far as written matter is concerned, and by photostat where drawings appear—(Eight copies or what court orders):

Assignments, Plaintiff's Exhibits 2-A to 6-C, inclusive
The Trust Agreements, Plaintiff's Exhibits 26, 77 & 78

The License Agreements, Defendant's Exhibits 4S, 4T, 4U and 4V (Same as Plaintiff's Exhibits 38A to E, 39A to E and 40, so far as 4-T, 4U and 4V are concerned)

* The Chrysler correspondence, etc. Defendant's Exhibits 3U, 5A and 5B

The Royalty Report, Defendant's Exhibit 4-I

* The File Wrappers $4L_2$ to $4L_4$, inclusive

The Venner application, working drawing, correspondence, etc. Defendant's Exhibits J, K & L

The Bill of Complaint and Answer in Simmons Suit, Plaintiff's Exhibit 25 and Defendant's Exhibit — R. p. 1015

Bill and Answer in Cleveland Trust *vs.* National, Defendant's Exhibit 4-Y

Bill and Answer in Cleveland Trust *v.* Long, Defendant's Exhibit 4-Z

* Papers regarding Chrysler activity in suit, Defendant's Exhibits 3-V, 5-A and 5-B

Weems Agreement, Defendant's Exhibit X

Publications re Monckmeier races, Defendant's Exhibits 4-R, $5\text{-}F_1$ to $5\text{-}F_{12}$, inclusive

Schoengarth Application Matters, $5\text{-}K_1$ to $5\text{-}K_{12}$, inclusive, except $5\text{-}K_{10}$

Hartog *v.* Pomeroy Interference Matters, Defendant's Exhibit $5\text{-}H_1$ to $5\text{-}H_3$, inclusive

Randall Sketch of Gulick Piston, Plaintiff's Exhibit 29

Winchester Sketch of Gulick Piston, Plaintiff's Exhibits 35a to e, inclusive

Gulick Sketch, Plaintiff's Exhibit *44

Excelsior Motor Iron Piston, Plaintiff's Exhibit *45

Because of Rule 75, paragraph b, we may feel required to omit those exhibits that are starred above from our praecipe, for our own protection, although we would not vigorously oppose your effort to include them, preferring to get some ruling by the Court as to their materiality, for our own protection. This will not be decided, however, until I have a chance to talk it over with Mr. Richey.

If you wish to make any shift between the printed and photostat portions of the record as outlined above, please

let me know at once, so that I may make up the revised Praecipe.

Very truly yours,

WM. C. McCOY.

WCM/LR.
c/c to Mr. F. O. Richey

February 25, 1935.

Mr. J. H. Bruninga,
2119 Railway Exchange Bldg.,
St. Louis, Mo.

Re: Piston Suits—Praecipe.

Dear Mr. Bruninga:

As the result of our interview with Mr. Sutherland on Thursday, February 21st, we have redrawn the Praecipe to include all of the exhibits that you insist upon including in the Record, with the exception of the assignments of the patents in suit. A copy of the revised Praecipe is enclosed. It seems to us that this title matter is closed, so far as title in the Plaintiff, the right to own these patents, and the right to sue under them is concerned. Please reconsider this question of including the assignments.

We are also including the many Defendant's exhibits that you desire to have incorporated in the Praecipe. I believe that these are correct, with the exception of Exhibit 5-I, which Mr. Sutherland thought could be reduced considerably by selection of the important pages.

We are doing our best to meet all of your requirements in preparation of this Praecipe and have met all of them except as to the assignments, and therefore we would like to have from you, at an early date, advice on the following matters:

1. As to whether you will approve the Praecipe without the assignments; and

2. Whether you require all of Defendant's Exhibits 5-I.

We are also enclosing a copy of a proposed stipulation that was sent to you some time ago but upon which we

have had no reply. It is believed that you are in accord with us on the proposition of consolidating the Record into one printed transcript. If there is any objection to this stipulation please advise us at once.

Very truly yours,

WM. C. McCOY.

WCM/LR
Encl.
c/c to Mr. B. M. Kent.

BLANK PAGE

BLANK PAGE

FILE COPY

Office - Supreme Court, U. S.
FILED
JAN. 16 1940
CHARLES ELMORE CROPLEY,
CLERK

SUPREME COURT OF THE UNITED STATES.

OCTOBER TERM, 1939.

THE SCHRIBER-SCHROTH COMPANY,
Petitioner,
vs.
THE CLEVELAND TRUST COMPANY,
CHRYSLER CORPORATION,
Respondents.
No. 650 9

THE ABERDEEN MOTOR SUPPLY COMPANY,
Petitioner,
vs.
THE CLEVELAND TRUST COMPANY,
CHRYSLER CORPORATION,
Respondents.
No. 651 10

THE F. E. ROWE SALES COMPANY,
Petitioner,
vs.
THE CLEVELAND TRUST COMPANY,
CHRYSLER CORPORATION,
Respondents.
No. 652 11

MOTION TO CONSIDER PETITION FOR WRITS OF CERTIORARI ON REDUCED NUMBER OF COPIES OF RECORD.

JOHN H. BRUNINGA,
JOHN H. SUTHERLAND,
Attorneys for Petitioners.

St. Louis Law Printing Co., 415 North Eighth Street. CEntral 4477.

BLANK PAGE

SUPREME COURT OF THE UNITED STATES.

OCTOBER TERM, 1939.

THE SCHRIBER-SCHROTH COMPANY,
Petitioner,
vs.
THE CLEVELAND TRUST COMPANY,
CHRYSLER CORPORATION,
Respondents.
No. .....

THE ABERDEEN MOTOR SUPPLY COMPANY,
Petitioner,
vs.
THE CLEVELAND TRUST COMPANY,
CHRYSLER CORPORATION,
Respondents.
No. .....

THE F. E. ROWE SALES COMPANY,
Petitioner,
vs.
THE CLEVELAND TRUST COMPANY,
CHRYSLER CORPORATION,
Respondents.
No. .....

MOTION TO CONSIDER PETITION FOR WRITS OF CERTIORARI ON REDUCED NUMBER OF COPIES OF RECORD.

Now come counsel for petitioners in the above-entitled causes, and represent:

That they are filing herewith their petition for writs of certiorari to the United States Circuit Court of Appeals for the Sixth Circuit, accompanied by a certified transcript of

the record below; said transcript containing all of the proceedings before and after these causes were here as Nos. 3, 4 and 5 of the October, 1938, Term.

That when petitioners applied for and obtained writs of certiorari in these cases at the October, 1937, Term they made diligent inquiry for and obtained all known-available copies of the printed record in the Circuit Court of Appeals in order to meet the requirements of this Court.

That petitioners were appellees below, were not responsible for printing the record there, and consequently are not chargeable with failure or neglect to print a sufficient number of copies; that the transcript consists of approximately 2,428 printed pages, and that the original cost of printing the proceedings in the District Court, as petitioners are informed, was $5,090.86.

That petitioners are informed that there are two copies of the printed record, as used before, now in the custody of the librarian of this court; and the certified transcript, as used before, on file in the office of the clerk of this court; that counsel for the petitioners have but one complete copy of the record, and that petitioners are advised and believe that counsel for the respondents have one or more copies of the record for their use.

That while petitioners cannot furnish the required number of copies of the record as printed for the Circuit Court of Appeals without having the same reprinted, petitioners have had printed the required number of copies of the proceedings in the Circuit Court of Appeals (other than the record as it came from the District Court), both before and after the causes were remanded by this Court.

Inasmuch as these same causes were before this Court at the last term, the majority of the members of this Court are already well informed with respect to the record in general.

Wherefore, it is prayed that the Court receive and consider the accompanying petition for writ of certiorari upon the certified copy of the transcript filed herewith (and the three additional copies available to the Court); and grant leave to petitioners to serve respondents with notice of the filing of the petition, a copy of the petition and supporting brief and a copy of the proceedings in the Circuit Court of Appeals after the causes were remanded to that Court for further proceedings, but without a copy of the record as printed for the court below.

Respectfully submitted,

JOHN H. BRUNINGA,
JOHN H. SUTHERLAND,
Attorneys for Petitioners.

January 6, 1940.

BLANK PAGE

FILE COPY

Office - Supreme Court, U. S.
FILED
FEB 23 1940
CHARLES ELMORE CROPLEY
CLERK

In the Supreme Court of the United States

OCTOBER TERM, 1939.

THE SCHRIBER-SCHROTH COMPANY,
Petitioner,
vs.
THE CLEVELAND TRUST COMPANY,
CHRYSLER CORPORATION,
Respondents.
No. [redacted] 9

THE ABERDEEN MOTOR SUPPLY COMPANY,
Petitioner,
vs.
THE CLEVELAND TRUST COMPANY,
CHRYSLER CORPORATION,
Respondents.
No. [redacted] 10

THE F. E. ROWE SALES COMPANY,
Petitioner,
vs.
THE CLEVELAND TRUST COMPANY,
CHRYSLER CORPORATION,
Respondents.
No. [redacted] 11

BRIEF FOR PLAINTIFFS-RESPONDENTS, ON THE PETITION FOR WRIT OF CERTIORARI OF THE DEFENDANTS-PETITIONERS.

ARTHUR C. DENISON,
F. O. RICHEY,
WM. C. MCCOY,
MILTON TIBBETTS,
Attorneys for Plaintiffs-Respondents.

THE GATES LEGAL PUBLISHING CO., CLEVELAND, OHIO

BLANK PAGE

INDEX.

Hard Cases Should Not Make Bad Law 3

The Facts 9

Lack of Identity Between Jardine and Long 24

Argument:

I. Petitioner's brief pp. 14-17 27

The Court of Appeals did not treat "flexing webs" as essential elements, but rather as qualities of an element named. Such qualities were not surrendered during the prosecution of the application or excluded from consideration in interpreting the patent, nor did the Court of Appeals refuse to follow this court 27

II. Petitioner's brief p. 18 34

The Court of Appeals did not decide that in order to make the Long piston an anticipation Long must have understood "the scientific explanation of the mode of operation of the Long pistons" 34

III. There was no error in issuing the injunction against Exhibit 1 36

Conclusion 38

AUTHORITIES CITED.

Cases Cited.

Barbed Wire Case, 143 U. S. 275 14

Carnegie v. Cambria, 185 U. S. 403 ..... 30, 31, 36

Coffin v. Ogden, 18 Wall. 120 14

Dayton Motors v. Stagnaro, 307 U. S. 627 2

Deering v. Winona, 155 U. S. 286 14

General Tire & Rubber Company v. Fisk Rubber Company, 84 L. Ed. 85 2
Keller v. Adams, 264 U. S. 314 1
Layne v. Western Well, 261 U. S. 387 1
Leeds & Catlin v. Victor, 213 U. S. 301 7
Mumm v. Decker, 301 U. S. 168 ..... 14, 24
Neirbo v. Bethlehem, 84 L. Ed. 123 3
New York Trust v. Eisner, 256 U. S. 345 25
Oklahoma v. Oklahoma, 84 L. Ed. 329 3
Smith v. Hall, 301 U. S. 216 ..... 14, 24
Symington v. National, 250 U. S. 383 ..... 14, 24
Waterman v. McKenzie, 138 U. S. 252 ..... 8, 37

Cases in Petitioner's Brief Discussed.

Greenwalt v. American Smelting 31
McCarty v. R. R. Company 29, 31
Permutit v. Graver 30, 31
White v. Dunbar 29

Texts.

March of the Iron Men, by Burlingame, 1938, pp. 360 to 372, and 306 to 310 5
Walker on Patents, Deller Edition, pp. 1242 and 1243 30
Walker on Patents, 6th Ed., Sec. 106 36

In the Supreme Court of the United States

OCTOBER TERM, 1939.

THE SCHRIBER-SCHROTH COMPANY,
Petitioner,
vs.
THE CLEVELAND TRUST COMPANY, CHRYSLER CORPORATION,
Respondents.
No. 650.

THE ABERDEEN MOTOR SUPPLY COMPANY,
Petitioner,
vs.
THE CLEVELAND TRUST COMPANY, CHRYSLER CORPORATION,
Respondents.
No. 651.

THE F. E. ROWE SALES COMPANY,
Petitioner,
vs.
THE CLEVELAND TRUST COMPANY, CHRYSLER CORPORATION,
Respondents.
No. 652.

BRIEF FOR PLAINTIFFS-RESPONDENTS, ON THE PETITION FOR WRIT OF CERTIORARI OF THE DEFENDANTS-PETITIONERS.

The Respondents herewith respectfully point out that in their opinion the present petition should be denied.

(1) There is no diversity of decision between Courts of Appeals below (*Keller v. Adams*, 264 U. S. 314, 319; *Layne v. Western Well*, 261 U. S. 387, 393).

(2) No question of public interest is involved. The questions presented by the defendants are merely the ordinary questions of validity and infringement which are

presented and decided in any patent suit and there is no more reason for this Court taking up these causes on the defendants' petition than for taking up any and every patent cause decided in any Court of Appeals. These causes were taken up by this Court before because there was present a combination of (a) "the doubtful validity of the patents" and (b) the concentration of the automobile industry in the Sixth Circuit. The latter alone cannot be reason for taking up the causes because a great many of the decisions of the Sixth Circuit Court of Appeals relate to patents in the automobile industry and this Court has consistently refused to take them up for this reason alone. (For example, this Court recently denied petition for certiorari in the cases of *General Tire & Rubber Company v. Fisk Rubber Company,* 84 L. Ed. 85 and *Dayton Motors v. Stagnaro,* 307 U. S. 627, presented on such grounds.) Only when on second petition for rehearing the question of "the doubtful validity of the patents," due to a question of disclosure, was presented in combination with the concentration of the automobile industry in the Sixth Circuit did this Court take up these causes. As we understand it, the causes were taken up because of the presence of the two elements of doubtful validity upon the particular question and the concentration of the automobile industry in the Sixth Circuit. They were not taken up, as we understand the situation, because of the presence of *any* doubtful question of validity and that concentration. Denials of other petitions for certiorari from the Sixth Circuit Court of Appeals in patent cases relating to the automobile industry where it was represented that questions of doubtful validity of the patents were involved, have been denied. Here there are presented as questions of doubtful validity of the patents only such questions as have been presented in these other petitions for certiorari to the Sixth Circuit

Court of Appeals in automobile cases which this Court has denied.

(3) We do not presume to say what the Court of Appeals had in mind (beyond what that Court said) in the footnote at the bottom of the second page of its opinion (p. 2397) regarding the possibility of the institution of a suit in another Circuit under the Declaratory Judgment Act. It is reasonable to assume that one thing the Court might have had in mind is the waiver of venue in the Federal Courts by a corporation who registers in a foreign state (*Neirbo v. Bethlehem*, 84 L. Ed. 123 and *Oklahoma v. Oklahoma*, 84 L. Ed. 329). Each of the plaintiffs is a corporation and we are informed and believe—though it is not of record—that each is registered in states in other circuits than the Sixth Circuit.

HARD CASES SHOULD NOT MAKE BAD LAW.

Throughout its petition and brief thereon, the petitioners parade (1) Aluminum Company of America and (2) the so-called "patent pool," as if the petitioners hope to make out a hard case on one of these propositions and on the basis thereof this Court is asked to make bad law.

(1) Aluminum Company of America is no more than a non-exclusive licensee under the patents in suit, as was held by the Master against the contentions made here by the petitioners who took no exception to such ruling. Whether Aluminum Company of America has done anything reprehensible or not is a question in issue in the United States District Court in the Southern District of New York and now on trial there. That question no doubt will be given proper and extensive consideration by Judge Caffey before whom the case is on trial and justice will be done on the evidence presented on the issues there made up as is fitting and proper under our system

of the administration of justice. Whatever may have been the conduct of Aluminum Company of America it is therefore not, and should not be, made a reason for making bad patent law in these causes.

(2). The so-called "patent pool" consists of what is more properly called a patent estate for which the plaintiff herein is the trustee. This estate was started by an inventor and is participated in by several inventors. Aluminum Company of America was brought into the pool after it was formed. The so-called patent pool was organized more than twenty years ago by individual inventors who could do nothing alone; its entire net receipts from royalties belong to its certificate holders. Through issues of certificates in exchange for patents and through changes in ownership there are outstanding about 4500 certificates. 1100,—a little less than one-quarter, belong to Aluminum Company of America; 1100 belong to the Bohn Aluminum & Brass Corporation (of Detroit,—a company having no financial relationship to Aluminum Company of America); 600 belong to the Packard Motor Car Company, and the remainder (about 1700) belong to individuals, inventors and associates (R. p. 271).

The question of whether or not it is proper and lawful for individual inventors and patentees to group their patents and trustee them is a question for Congress to decide. We are informed and are convinced that legislation for dealing with these questions is either proposed or pending before Congress at the present time, and therefore there is less need for its being presented here as a hard case to justify a request for poor law than if the question were an open one. The formations of these estates has resulted from the inability of individual inventors to bear the burden of protecting their rights under the patent law against such defensive tactics as have been employed here and nothing better illustrates this inability

than the instant suit. First, the District Court did not have the time to try the causes, so a Master was appointed. The Master spent many days trying all the defenses known to the patent law and as a result a record was built up which cost around Five Thousand Dollars to prepare for the Court of Appeals. Even this sum is beyond the means of the average individual inventor. The causes have been twice before the Court of Appeals and once before this Court and now, after a lapse of nine years since the Bill was filed, proceedings are pending asking this Court to take the causes up again. Against such defenses individual inventors are forced to enter these patent estates if they are to have any hope of realizing anything for the time and efforts which they have made in making their inventions and taking out their patents. The making of bad law for the purpose of striking at the patent pool would result in increasing the defenses available to infringers, further complicating patent litigation and increasing the reasons why inventors must go into patent pools if they expect to receive anything from their inventive efforts.[1]

---

[1] The first patent pool on record was formed a little less than one hundred years ago by Elias Howe, the inventor of the sewing machine. Although it is difficult at this time to appreciate the tremendous benefits that resulted from the invention of the sewing machine, we still have some conception of its importance. Howe knew nothing but poverty and distress as a result of his invention until a pool was organized including his patent. After the formation of the pool he realized substantial benefits financially and otherwise from his invention. His genius was released from his fight against poverty and distress to be utilized in other inventive work. On the contrary, Goodyear, who made the most useful and revolutionary invention of vulcanizing rubber, entered no pool, but spent the rest of his life in poverty and distress (See *March of the Iron Men*, by Burlingame, 1938, pp. 360 to 372 and 306 to 310). Howe entered the patent pool and could, to quote Mr. Burlingame, "sit back at last from his labors" to profit from his invention. Goodyear entered no patent pool and "when the Cross of the Legion of Honor was awarded to him, the news thereof was brought to him at the debtor's prison in Clichy."

Instead of making bad law to still further complicate the administration of the patent law and thereby to increase the burden on inventors and reasons for such things as patent pools, it is important to preserve the patent law as it was during the long period when industrial progress increased under the fostering administrations of that law.

These statements are justified by the following findings appearing in the Report of the Monopoly Investigating Committee, headed by Senator O'Mahoney, and made about January, 1939:

> "1. There seems to be a general agreement by these witnesses, as well as by those who previously testified at the Department of Justice hearings some weeks ago, that inventors and business still need the protection and stimulation of patents."
>
> * * * * *
>
> "the patent system has been of inestimable benefit to the country in promoting industrial and scientific development, and may be regarded as one of the principal causes of American industrial supremacy,"
>
> * * * * *
>
> "(6) The fact that patents are keystones in many very important industries has been brought home to us with great emphasis. I doubt whether I had realized their significance as a primary force in the operations of the economic system."
>
> * * * * *
>
> "(7) There was practically unanimous agreement among the witnesses that Congress, by the enactment of the Patent Law, has given this country a system far superior to that which exists in any other country."

In a rapidly changing world we must stand—if we can stand upon anything, on the facts found by a Committee of Congress that has made such a careful and exhaustive investigation of an institution. If our patent institution is as valuable as the Committee finds, it is reasonable to con-

tend that we should preserve the rules and practices under which it has been built up and not rock it by changing the rules and standards to make it more difficult to encourage invention. Indeed, it would seem that if there is any change to be made, that change should be to favor the inventor.

"Bad Law" which would result from the proposals of our adversaries, are the following:

(a) A different rule of interpretation for the prior art and for the patent in suit; they always have been the same and should be the same.

(b) It is proper that a claim should be interpreted in the light of the specification. This is a contract rule and not particular to a patent, and if changed in the patent law, it should be extended to the contract law.

(c) Combination claims are properly considered as if the combination was a separate legal entity from the elements (*Leeds & Catlin v. Victor,* 213 U. S. 301); that to consider the invention as one element is to change the whole basis of the patent law.

(d) Where a patentee mentions a feature like "flexible webs" in his patent specification, he is not to be presumed to have abandoned it merely because he does not reiterate it in his arguments before the Patent Office.

(e) The rule of proving a prior use beyond a reasonable doubt is a sound rule and should not be changed as must be done if the Long piston is to be held to be prior to Jardine.

(f) The rule of sufficiency of disclosure for prior uses and prior patents has always been the same. It should not be changed. It is just as easy to reproduce a device from a drawing as from a prior specimen. Indeed, in many ways the drawing is more reliable because it does

not change over the years, whereas the prior device through wear, use and obsolescence often changes. Today more devices are made from drawings than from copying mechanisms because the drawing is the better guide. To change the rule now and ignore the Long patent, No. 1,872,772, and its instructions, and to be guided by the oral evidence regarding a specimen of the Long piston would be not only to change the established rule of patent law on the subject, but to fly in the face of experience in the industries.

(g) The rule in *Waterman v. McKenzie,* 138 U. S. 252, is a good rule and should not be changed.

(h) The rule that where a party fails to except to the finding of a Master against him he abandons the issue so decided, is a good rule and should not be changed; there ought to be an end to litigation and questions once put at rest should remain at rest.

The learned Judges who in the past have tried and decided the many patent cases upon which these rules have been based, possessed a sound understanding of human psychology and displayed profound wisdom in establishing these principles. They are not lightly to be changed for the purpose of striking at what in passing moments may be considered to be bad cases whose disposition, if they are bad cases, is properly before other tribunals or before Congress.

THE FACTS.

The "Summary and Short Statement" on pages 2-8 of the petition is full of inaccurate or half-true statements, fertile with misleading.

The primary and outstanding fact, against the background of which all the contentions as to petty details must be viewed, is that for many years the most expert engineers in the United States and abroad in automotive development had endeavored to devise a completely successful aluminum piston for iron cylinders of automobile engines, and every effort had been a practical failure, so that in the trade aluminum pistons had a "black eye." As against this history of failure, the Jardine type of aluminum pistons was successful theoretically and practically. This type could be installed when cold with a clearance of only 2/1000 of an inch; was strong and sturdy enough to last for scores of thousands of miles; and would operate at high speed and intense heat without expanding enough to seize or "set up," and without scoring either piston or cylinder. Because of these achievements this type as refined by Maynard was in a short time universally adopted by almost the entire industry which used aluminum pistons, and they displaced iron pistons excepting in a few instances. The Jardine piston, as refined by Maynard, had a use of millions, and, when modified in plainly immaterial particulars, was used by the actual defendant in this case, the Sterling Company, and by different ones of the plaintiff's licensees to the extent of many millions.

Another thing which has been used to becloud the issue is the constant attack upon the Aluminum Company of America, as if it were the plaintiff in this case and as if, had it been plaintiff, attacks upon it would make a good defense to this suit.

We proceed to note specific corrections which should be made in petitioner's Statement of Facts.

Page 3, line 12:

That the Aluminum Company of America was an exclusive licensee, so that it must be a party plaintiff, was a point made by defendants (petitioners here) before the Master. It was *overruled* by him (R. p. 1097 & 1105 & 1106). Defendants took no exception. The point was not raised and was not open, in the District Court or in the Circuit Court of Appeals, on the first hearing. To the attempt to raise it in the Court of Appeals on the second hearing, that court said (R. pp. 2405 and 2406):

> "The appellants, however, contend that the decrees should not have provided injunctive relief to the appellee Trust Company on the ground that it is the bare title holder of the patents in suit, with the Aluminum Company of America as exclusive licensee the only party entitled to seek it. They thereby deny our power to grant restraint in respect to claims now found valid and infringed. The master, however, concluded that the Trust Company holds the entire right, title and interest to all patents in suit except an undivided half of the Maynard patent, that it might sue in its own name without joining with it the beneficiaries under the trust, and that the Aluminum Company is a non-exclusive licensee and not a necessary party to the suit. No exception was taken to his findings or conclusions in this respect, and they were not challenged when the case was first before this court. The right of appellees to injunction was no longer in issue when we gave direction for mandate. It is now the law of the case that appellees are entitled to an injunction restraining infringements of any claims of any of the patents in suit now adjudicated as valid and infringed."

The question is not open here.

Page 4, lines 13-16:

The Circuit Court of Appeals did *not* hold that the presence of flexible webs in Jardine distinguished him from the prior art; it only observed that webs, having as a characteristic the necessary flexibility, were present in the structural combination which constituted the invention of the claims in suit.

Page 4, line 25:

The holding of the Circuit Court of Appeals as to Jardine is *not* contrary to, but is in accord with, the former decision of this court in these cases. This court, at the importunity of defendants, having made the strict rule of interpretation of the law of these causes, defendants are complaining when the Court of Appeals applied that rule to defendants' prior art. Now it is defendants' ox that is gored.

Page 4, line 30—page 5:

Jardine did *not* surrender his right to have the necessary flexibility considered as a quality of his webs. Jardine originally presented seven claims (R. pp. 234-6), some of which were essentially equivalent to the finally issued claims 1, 8, 11. No one of these original claims recited "flexible" before webs. Other pending applications (Gulick, Long, Maynard, Hartog) had claims which more or less vaguely did recite yielding or bending as characterizing their respective skirt carriers. The Examiner directed fourteen separate interferences.[2] Pursuant

[2] It should be noted that the declarations of interference (R. pp. 2068 to 2105) do not specify the particular Long application with which the interference was declared. Various interference decisions found in the record (No. 49570, p. 1548, No. 49571, p. 1565, No.

to this direction, Jardine took from some of the other applicants and added to those he then had, six claims which recited yieldability or bending of the "arms," "carriers" or "connecting means." (No one of these claims mentioned "flexibility" or "webs"[3] (R. pp. 2069-2100)). The others copied some of Jardine's existing claims. No one of these six claims depended upon its "yieldability" or "bending" to distinguish it patentably from the prior art; that recited quality did not *per se* give inventive character to any one of these claims. Each claim was to a complete structural combination in which the "joining means" had, because of its arrangement in the combination, the quality necessary to cause the structural parts to work as described. In such of those interferences as were decided against him, Jardine did not lose this same quality in his own structure. He lost the particular structure-formula recited in each. For example, he lost (to Gulick) interference No. 49,572, but this interference called very broadly for "means" joining the bosses and the skirts (R. pp. 2077-8). Jardine's claims in suit are restricted to the particular means rightly called "webs" or things equivalent, and are restricted as well to the longitudinal slot not named in this interference count.

Then his patent issued, upon the claims he had before the interference, somewhat rewritten and revised, but not

---

[3] In one interference only, out of these six, it was recited "said skirt carriers being disconnected from the wall portion of the head and susceptible of being slightly flexed radially" (not laterally) (R. p. 2087).

(Footnote 2 continued)

49575, p. 1541) do specify that the Long applications involved were not the application which resulted in Long patent 1872772 but were based upon other Long applications not found in the record. Interference 49569 (R. p. 1533) is the only one found which does seem to involve the same Long application which resulted in his patent 1872772; and in this decision Long's claim to the 1916-17 conception and reduction to practice is discussed and discredited (see *infra*, pp. 14 and 15).

changed in any respect now material. There had been no occasion to "stress" web flexibility in the arguments. It had not been the "carrying" feature.

Page 6, lines 5-7:

It *is* clear that the Jardine claims in suit *were* "put forward" as combinations of structural elements including webs which would operate and thereby permit the split skirt to operate,—all as carefully described in the specification (Patent p. 1, lines 90-100, p. 2, lines 1-33, R. pp. 1295-6).

*Page 6, Footnote *:*

Long did *not* prevail over Jardine in any interference "including flexible webs." The printed record does not show who prevailed. In fact, in the six interferences where the particular claim in issue recited "yielding" or "bending" Gulick prevailed over both Jardine and Long. There was no decision as between Long and Jardine on any such issue. Gulick prevailed because it was then believed that his original specification sufficiently indicated lateral flexibility,—a conclusion which this court has reversed; and Jardine's filing antedated the Gulick amendment by some three years.

Page 6, the Long use and sale:

This section of the brief is very misleading. Long's patent 1872772 (R. p. 1736) (selected on the former hearing as the typical and vital Long invention) so definitely shows that the "webs" were rigid that petitioner has abandoned this patent as the basis of its claim, and has gone to an alleged physical embodiment, Exhibit F, one of Long's many pistons. Under the long established rule

of this court[4] that anticipating proof must be clear and convincing, even beyond reasonable doubt, and that recollection of twenty year old events unaided by records of any kind is insufficient, the existence of Exhibit F before March 11, 1920 (Jardine's filing date) is not proved.

To establish Long's early dates petitioner in this case did not call Long, who was then available in Detroit, though he evidently must have been the most competent witness. This may well have been because Long's testimony had been so discredited in the interference years before when recollection would be better. The Examiner said (he was affirmed by the Board) (R. p. 1535):

> "Here again as in connection with count one, Long is testifying as an item of sheer memory. The unaided memory of a witness testifying ten years after an event as to a large number of one of similar pistons is not sufficiently reliable. * * * There is no satisfactory corroboration for Long's claim." (Examiner here comments adversely, p. 1536, on the testimony of Stellman and Royalty who are also supporting witnesses in the present case.) (R. p. 1537) "Long's entire case for priority of conception is in substance based upon the unaided memory of several witnesses speaking about ten years after the event and speaking then with a degree of uncertainty that is inevitable under such circumstances. Long had fifteen to twenty applications for split-skirt pistons on file at the time he was testifying and had built a great many different forms for which no application was made. It was thought that no one after a period of many years would be able to recall the particular year when he saw a specific structure of any particular kind of piston from a large number of similar pistons, unless there was some special fact that had impressed upon the mind of the witness this particular

---

[4] *Barbed Wire Case,* 143 U. S. 275; *Deering vs. Winona,* 155 U. S. 286; *Symington v. National,* 250 U. S. 383, 386; *Smith v. Hall,* 301 U. S. 216, 222; *Coffin v. Ogden,* 18 Wall. 120; *Mumm vs. Decker,* 301 U. S. 168, 171.

year and structure. The Long case for priority is fatally defective."

No documentary evidence was offered here that was not before the Patent Office for repeated critical examination during the nine years of the interferences.

Petitioner,—as in all previous hearings,—takes advantage from this confusion arising from the multitude of "Long pistons." During the period 1918-1923 Long filed in the Patent Office at least sixteen different applications[5] (p. 1532). As to the specific details of most of them, the record is silent. Until after 1920 (and even later) Long was constantly engaged in changing and changing, trying to overcome demonstrated defects. It is beyond reason to suppose that any witness, testifying in 1933 from memory about events of 1916-1920, could definitely remember that the piston put before him in 1933 (Exhibit F) was the particular one of the many similar Long pistons used before March 1920, rather than like one of the forms in much greater use in 1921-24; and there is no documentary confirmation.

On page 7 of the petition is quoted the comment of this court, "the Long piston, whose webs concededly were laterally flexible."[6] This was an unfortunate misapprehension, for no such concession was ever made, and the record does not justify any such statement with the inferences which petitioner makes. The supposed basis for it arose

---

[5] This list shows eleven applications but it is evident that cases B, C and K were for some reason omitted (perhaps they had been closed), and the list does not contain the serial numbers of the applications which resulted in patents 1,395,441 (R. p. 1728) and 1,489,499 (R. p. 1732). This makes a total of sixteen. The Examiner said (R. p. 1537) that "Long had fifteen to twenty applications for split-skirt pistons on file at the time he was testifying."

[6] This statement might have been satisfied by the form of Long piston in use about April, 1923 (the date of the Gulick amendment). In the present case, the particular Long piston with its supposed web flexibility, must be carried back of March, 1920.

in this way: The expert witness for respondent (plaintiff be'ow) was shown Exhibit F and asked if there was web flexibility. The question obviously referred to its condition at that time, in his hands and not when in use. The question had no reference to its performance in a cylinder while in operation. The witness said, "there is flexibility in the webs" (R. p. 1010). An inspection of the exhibit clearly shows that the free edges of the skirt at the six slots will yield a trifle to direct pressure, but also shows upon such inspection and handling that no web flexibility can possibly develop in an engine because of the relation of the webs to the remainder of the structure. It is clear that what the witness meant was that the web would flex if sufficient bending force were put upon it, just as he had been saying about the webs of the other structures. *His answer does not touch the question whether the webs would flex in actual operation.*

At pages 6 and 7 of defendant's petition, a single question and answer relating to this subject is quoted from the testimony of Dr. Jeffries, the plaintiff's expert at pages 1009 and 1010 of the record. There is always danger in accepting such an isolated question and answer without considering the context. When we consider the context on pages 1009 and 1010 of the record, we find that not only is the conclusion which the defendants seek to draw from the single question and answer erroneous, but that the Long piston was far afield from the Jardine invention. The witness was handed the pistons, Exhibits E and F, and asked about the flexibility of the webs. The witness said he had seen many trunk type pistons with no slots at all that have the same kind of a surface as Exhibit E, and *that the hard rubbing opposite the webs on Exhibit F showed that the webs had expanded out and pushed the cylindrical part of the piston skirt against the engine*

cylinder in operation. From this it was clear that the webs had not flexed in use but, on the contrary, instead of flexing and yielding so that the cylindrical parts of the piston would not rub against the cylinder wall, the webs had acted rigidly, as Long said they would in his patent, and pushed the cylindrical parts of the piston skirt up against the engine cylinders so hard that there was rubbing even at the .005 clearance which the Franklin Company found it necessary to give the Long piston as against the .002 clearance sought for and secured by Jardine. After the settlement of this question the witness was then asked if, nevertheless, the webs were not flexible. This was the question and answer quoted in the defendants' petition. The witness replied that they were, clearly having in mind that it was possible to flex them by hand or otherwise notwithstanding they did not flex in use as evidenced by the rubbing, concerning which he had just testified, and thus disposing of any claim that they might have flexed in use. Proceeding down page 1010 the witness then gave the history of the Long piston which corroborates his testimony and the conclusive evidence furnished by the rubbing to which we have just referred. In giving this history the witness said that the "Long pistons were not satisfactory" and that those who were continuously in touch with the Franklin Company would "come back with repeated tales of how they were not satisfied" with these Long pistons, and that they were finally abandoned, after which there were no complaints (R. p. 1011). Thus, when we examine the context of the question and answer upon which defendants rely, we find that the witness having already shown through indisputable evidence on the piston Exhibit F itself that the webs did not flex, stated that they could be flexed, meaning that it was possible to flex them by hand even though they did not flex in use. As we are here concerned with flexibility

in use and not flexibility by hand, the conclusive evidence of the lack of flexibility in use, based on the rubbing found opposite the webs of Exhibit F, is all that matters. What could be done by hand or under other circumstances is immaterial.

This Exhibit F was made at some time after November, 1919, because it bears the stamp of Weems as maker and he did not take over the Long business until November, 1919 (R. p. 1625). No one knows when it was made (before or after March, 1920), where it had been in the meantime, or how it came into the possession of defendants' counsel. Plainly, this testimony is not an admission that every one of the various forms of Long's pistons before March, 1920, had web flexibility, even when cold and manipulated by hand,—much less that they would have that capacity under the conditions existing in an engine cylinder in operation. There is no identification of Exhibit F as being the 1916-19 Long pistons, except the oral testimony of witnesses (with no documentary evidence whatever), that Exhibit F was "like" the earlier ones. It is hardly conceivable that such evidence would be sufficient even if it might be assumed that Long and Weems had been making the same thing from 1916 to 1921; but it cannot be sufficient against the existing background of many different forms in many different patent applications filed within that period,—to say nothing of forms that never reached the stage of application for patent.

The record shows only three of the Long patents. No. 1,395,441, filed December 9, 1918 (R. p. 1728), contains no webs at all. The whole skirt is carried by and depends from the edge of the head. No. 1,489,499, filed December 9, 1918 (R. p. 1732), has no web carrying bosses and skirt. The parts 8*8* (Fig. 5) are rigid braces from the bosses to the thrust side of the skirt to resist

the thrust and prevent any bending of the opposite side of the skirt (lines 103-106, p. 1, R. p. 1733) and are so tied together by the skirt that they can not flex. No. 1,872,772 (R. p. 1736) filed March 7, 1919, still retained Long's earlier plan of having the controlling portions of his skirt (4,4) depend directly from the edges of the head (Figs. 1 & 2) and carry the pin bosses, with no provision for or possibility of yielding or flexing in those skirt portions 4, because they would be unyieldingly carried out against the cylinder by the thermal expansion. Then, four sections of the skirts (6,6) being two on each side, were completely severed from the main skirt so that they would fall away, unless prevented; and this was prevented by carrying these four sections from the pin bosses by "connecting sections" 10 (lines 54-60, R. p. 1737). These "sections" respondent now calls "webs," though they plainly are not the "webs integral with the head" and, "carrying the pin bosses" of Jardine. Whatever name is given them, they are not flexible or bending or yielding. Not only would this be impossible in operation,—for they are attached to sections 6 at the center of 6 and any thermal circumferential expansion in 6 would pull the connector 10 equally in opposite directions,—but Long said (p. 2, line 25) that they reinforce the sections 6 and hold them outwardly against the forcing thrust of the connecting rod so that they "will be *rigidly* held against bending" (line 33, R. p. 2),[7] while in Jardine (R. p. 1294) (as in Gulick, Maynard and this infringing Exhibit 1) the circumferential expansion of the skirt to close the slot, as well as any radial

[7] In Exhibit F, as partially shown in the drawings of patent 1,872,772, the free sections 6,6,6,6 carry at top and bottom, and sections 4,4, carry at their free bottom edge stiffening flanges plainly intended to prevent flexibility, and to compel the section to respond as a whole to the supposed (mistakenly supposed) compression by the cylinder.

expansion of the web, tends to bend the webs in one direction only.

Whatever the character or date of Long's piston, as actually made and sold, the six slotted form was a "contraption" having a skirt with twelve free (and possibly vibrating) edges,—a skirt which, unless it departed from the patent, had six points at which it could not be distorted by cylinder pressure in operation (the top and bottom pin boss connections (Fig. 5, R. p. 1736) and the four connector 10 junctions with the skirt) and it could not and never did operate upon the principles of the Jardine-Maynard form, which permitted assembly cold, with a clearance of only 2/1000 of an inch.

This is demonstrated by the experience of the Franklin Company. Respondent would have us believe that it was early in 1916-17 that Long had completed his experiment and developed Exhibit F and shown it to the Franklin Company, through its superintendent Spellman. On April 13, 1918, Long wrote to Franklin that he wanted to interest them in a "patented piston" he had (R. p. 1446) and May 9, 1918, he was told by the chief engineer to send one on for trial (R. p. 1445). On July 20, 1918, on a test, the piston "set up" (froze) in nineteen minutes. On October 5, 1918 (R. p. 1438), on another test, a full set was installed in a Franklin car, with a clearance of two or three thousandths; after ten minutes the piston seized; then they decided to try a 5/1000 clearance. In March, 1919, Mr. Spellman reported to the Franklin Company that Mr. Long "had a new design for aluminum pistons" (R. p. 1629) and that there had been a road test of 970 miles (an entirely insufficient test for sturdiness). The clearance was not given, but the cylinders were scored (R. p. 1631). Some test was in progress in May, 1919, covering a Long piston with "floating

wrist pins," whatever that was (R. p. 1440). The test showed excessive wear of parts. On April 8, 1920 (R. p. 1587), the Franklin Company announced that after April 15, 1920, it could furnish Long type pistons, saying: "While these pistons have not proved satisfactory in production, we find they work very well" in cylinders which had been worn five or six thousandths of an inch. In November, 1920 (R. p. 1588), the Franklin Company announced in a circular to all its dealers that it had at last a satisfactory aluminum piston, plainly admitting that until that time it had not been satisfactory because too large a clearance had been necessary. "A new design has been perfected whereby we are now enabled to fit aluminum pistons with two to three thousandths clearance. * * * This new piston is a distinct improvement." (This was eight monhs after Jardine filed.)

This is a distinct admission that all the Long pistons experimented with up to that time had not solved the aluminum piston problem because they had to be installed with so much clearance that they slapped, and it eliminates from the field of Jardine's anticipation Exhibit F, if in fact Exhibit F was the thing which Long made before 1920. However, even as late as April, 1922 (R. p. 1590), the Long type had to be installed with a clearance of 5/1000, demonstrating that the problem was not solved even then, and the company was considering abandoning that form and going to the oval type.

The substance of all this is that Long retained as outstanding features of Exhibit F and (probably) many of his other early pistons, two skirt sections attached rigidly to the ends of the pin bosses and four sections carried at their centers by a rigid connection,—such that the supposed slot closing performance of the skirt *could not*

happen, since expansion must stop when these rigid unyielding parts meet the cylinder. These Exhibit F Long pistons did not answer the need, and they only became fairly tolerable in the Franklin engines when, as shown by Exhibits E and G, they were modified by providing around the pin bosses the relief, indicated in the Jardine claims by saying that the skirt was relieved or cut away in the region of the bosses. Even then, they were finally abandoned by the Franklin Company, which substituted one of the later forms of pistons made by one of plaintiff's licensees.

At this large clearance the Long piston slapped (R. pp. 469 and 461) and collapsed (R. p. 939). It was expensive to make (R. pp. 401 and 461) and was too heavy to realize the lightness that was required. Although there was a crying demand for a light aluminum piston (R. p. 458) the Franklin Company was the only one to adopt the Long piston (R. p. 398). There was continual complaint about it (R. pp. 1010 and 1011). It would not stand up and was ultimately abandoned (R. p. 672).

In an effort to support its contention that the Long piston, Exhibit F, was prior to Jardine, defendants cite several pages of the record at page 6 of their petition. A reference to these citations shows that the oral evidence defendants cite to support their claims is vitiated by opinions and apologies for unreliable memories.

At page 378 the witness Chadwick did not say that the Long 1918 piston was like Exhibit F; he expressed *the opinion* that there was practically no difference, but on the next page said by way of warning one of the unreliability of his opinion "it is pretty hard to go back at that time to be exact to the exact design," having reference to the many and confusing designs of pistons of Mr. Long.

At page 441 the witness Royalty stated that Weems continued to make the "types" of pistons "like" Exhibits F and R while he was working for Weems. He did not say that the pistons were the same. As he worked for Weems up until the latter part of 1921, the Exhibit F type of piston may not have been made until after Jardine, and it would still respond to this testimony. In other words, if its making by Weems was begun and continued during the latter part of Royalty's employment by Weems, Royalty's testimony would be consistent with its history at the Franklin Company and otherwise not. We find the same warning about the unreliability of his testimony in his statements on cross examination at page 444 of the record, that during his employment with Weems he "had seen three or four different kinds of slotted pistons of" Long and "there were altogether perhaps four or five different kinds of pistons shown me by Mr. Long" and, further, on the same page, that he did not remember the various changes or the order of the tests on the pistons. At page 350 the witness Venner did not say that the construction of the first Long pistons was like Exhibit F; he expressed *the opinion* that they were practically identical with Exhibit F. This testimony, even if interpreted as defendants ask, is unimportant because there is no evidence of the date. Not only is the claim for the use of the Long pistons injured on cross examination, but the claim that the Long piston was of any value was spoiled by Venner on cross examination. He testified (R. p. 363) that the pistons which preceded his piston were all bad, seizing or slapping, and that this included the Long pistons (R. p. 364). At page 661 the witness did not identify Exhibit F as the piston referred to, but expressed the *opinion* that he could not at that time say that it *differed* from Exhibit F. This is not even oral evi-

dence identifying a piston. This testimony was all taken by deposition and not before the Master. There is no identification of Exhibit F at page 669 of the record. All the witness said was that he saw a certain piston "like Exhibit F" in 1920. Of course, all pistons are alike in some respects and unlike in other respects. There is no identification of this type of piston at page 680 of the record. Moreover, as we have shown, *supra,* this could not have been until in 1920 after Jardine's filing date. This witness also testified about various types of Long pistons. At page 685 the witness Burns, when asked to identify the piston, discussed it and its various features, saying during the discussion "I don't say this was on it." "I mean that seems as though it was later on; I won't say it was or wasn't on there." "I won't say that relief was on there or wasn't on there." This witness also referred to the various Long pistons. Manifestly, such evidence does not even reach the standard of oral evidence which has been emphatically rejected by this Court as sufficient to establish public use in such cases as *Symington v. National, supra,* and ruled as insufficient by this court in such cases as *Smith vs. Hall, supra.* If oral evidence is insufficient, still less so is oral opinion evidence submitted with warning that it is undependable because of the confusion based on a plurality of Long types of pistons.

Petitioner, on page 19, notes that the Court of Appeals "did not dispute the fact that before Jardine's earliest date, which is May 11, 1920, the filing of his application that Long pistons of the character represented by Exhibits E, F, G and R were in existence, etc." The Court of Appeals, for reasons which it states, found it unnecessary to examine this alleged "fact"; but that does not change the record. We have pointed out that there was

no sufficient evidence that Exhibit F (and the same is true of Exhibit R) was in existence before March, 1920; the balance of probability is that these exhibits were manufactured at a later date; and, in any event, both of these exhibits have the integral boss-skirt construction at opposite points on the skirt, with no relief or cut away portion to permit the boss expansion which, without such relief, would inevitably cause a "set up" if installed with the necessary minimum clearance. Exhibits E and G do have such cut away skirt portions and so, at these two particular spots, the essential inoperativeness has been cured; but there is no claim that these exhibits were manufactured before May, 1920. This fatal defect in the Long proof petitioner undertakes to meet only by the unaided recollection of witnesses to the effect that "this relief was always on all the pistons,"—although this is in flat contradiction to the testimony supposed to establish Exhibits F and R as the identical form of the continuous Long-Weems manufacture and in flat contradiction to all three of the only Long patents which were put into the record (R. pp. 1728, 1732 and 1736).

LACK OF IDENTITY BETWEEN JARDINE AND LONG.

Under familiar rules of patent law (*Coffin v. Ogden,* and other cases cited at page 14 of this brief), the burden was upon the defendant to prove identity between Jardine and Long. No proof was offered by defendant on that subject. The only proof in the record establishes lack of identity (R. p. 939). In these premises, counsel undertake to overcome history by logic. It was Mr. Justice Holmes who said that a page of history was worth a volume of logic (*New York Trust v. Eisner,* 256 U. S. 345, 349). We might add that a half page of history, supported by the evidence in the record, is worth two

volumes of hindsight logic of infringers. If we ignore the evidence and the history and weigh the issue of identity in the scales of the hindsight logic of the infringers, we still find lack of identity. We have pointed out that the only documentary evidence upon the Long piston is that of Mr. Long himself, and to the effect that his webs are rigid. If, nevertheless, this Court accepts the argument that they are flexible in use, there is still lack of identity because the principle of operation of the Jardine patent is not based upon web flexing alone. It includes, as Jardine says in his patent, "deformation and deflection of parts" (R. p. 1295, ls. 25 and 26). The full text of the sentence in which this statement is found is as follows:

> "I have found that these difficulties can be overcome by constructing a piston with its skirt or guide portion supported and slotted or divided in a manner to permit deformation and deflection of parts thereof without interfering with the performance of the essential functions of the respective parts."

This is described more in detail in the paragraph beginning at line 89 on the next page of the Jardine patent. There is no such action in the Long piston. There is no claim of any such action even by the hindsight logicians. Not only the description by Mr. Long of his piston, but the physical character of the piston itself is such as to make any such logic untenable.

Page 7 last line and beginning of Page 8:

As explained in the accompanying argument (*infra*, pp. 27, 34, 35), the conclusion of the Circuit Court of Appeals does not involve nor rely upon the theory here recited.

Nor did the Court of Appeals hold that flexible webs were the essence or the essential element of the Jardine

invention. Its frequent reference to the clear description of the flexibility of the webs in the Jardine specification was to show conclusively that the rule made by this Court in its former decision with respect to Gulick and Maynard did not apply to Jardine. But the Court's discussion of the operation of the Jardine patent was not limited to the flexibility of the webs; the court also discussed the description of the features of operation in the Jardine patent based on the "deformation and deflection of the parts" (R. p. 2402) and on the reaction of the engine cylinders on the guide segments (R. p. 2401).

ARGUMENT.

I.

Petitioner's brief pp. 14-17.

The Court of Appeals did not treat "flexing webs" as essential elements, but rather as qualities of an element named. Such qualities were not surrendered during the prosecution of the application or excluded from consideration in interpreting the patent, nor did the Court of Appeals refuse to follow this court.

Only a reading of the opinion of the Court of Appeals is necessary to show that it did not read the flexibility of the webs, *per se*, as an "essential element" into the Jardine claims. The opinion of that court at the first hearing with reference to the Gulick and Maynard patents was at first thought by this court to indicate that such flexibility had been "read into" the Gulick and Maynard claims. This court concluded such supposed action to be erroneous because it was in contradiction of the original Gulick specification and was not mentioned in the Maynard specification. The natural,—indeed the inevitable,—inference from the opinion and modifying order of this

court is that if such flexibility had been properly described in the specification it could rightly have been considered as an important or essential quality of the webs. On further consideration, on motion to modify the mandate, this court withdrew its assumption that the court below had thus read flexibility into the claims, and remanded that question for consideration. In its second opinion, the one now under review, the court below carefully explained that because web flexibility was fully described in the Jardine specification it could properly be considered as a characteristic thereof. The intent and the effort of the court below to follow the opinion of this court in this particular are obvious. (R. pp. 2401, 2402.)

As pointed out in the foregoing statement of facts (*supra,* pp. 9-27), it is a complete error to suppose that Jardine, by entering into the interferences which the Examiner directed, ever intended to or ever did present claims which rested for their patentability solely upon flexibility in the webs. All of the interference counts which mentioned yielding or bending in the webs were directed to complete combinations of elements making up a composite piston structure, which structure was described in different forms of words in the different interferences. The flexibility of his webs was completely described by Jardine in his specification, as one of their qualities which permitted the composite structure to perform as stated. That quality of the webs was inherent in his claims as originally made, before any interferences, and in his claims as granted after the interferences. There is no basis for the suggestion that it was ever given up or surrendered.

The idea that the qualities of an element must be specified in the claim, is a complete fallacy without any support. It was exhaustively discussed in the briefs upon

the former review, and the contrary conclusion is implicit in the former opinion of this court and its action as to the mandate.

No one of the claims in suit, as compared with the prior art, depends for its patentability upon the fact that the webs may yield or bend a trifle, and Jardine never had any such theory in any claim at any time. This quality pertains to precision in operation, but it has nothing to do with the question of invention over the prior art.

Petitioner's error of fact regarding the nature of the interferences is so complete that there is no room for response to the argument based thereon.[8]

We need go no further than the authority cited by our adversaries to show that the rule that one part of a contract may be interpreted in the light of other parts of the contract, applies to the construction of the claims of a patent in the light of parts of the specification. A patent is a contract as all agree. For example, in *White v. Dunbar,* cited at page 14 of our adversary's brief on its petition, the Supreme Court said:

> "The context may, undoubtedly, be resorted to, and often is resorted to, for the purpose of better understanding the meaning of the claim."

In *McCarty v. R. R. Company,* cited on the next page, the Supreme Court said with respect to consulting the

---

[8] These interferences were not declared because there was any conflict as to "flexible webs" *per se*. The recited "yielding" or "bending" was an obvious incident of the varying structures, which composite structures were said to be in conflict. For example, the issue in Interference 45972 was (R. p. 2077):

> "A piston having a head with top and side walls, in combination with a guide structure connected thereto and comprising diametrically opposite cylinder-engaging parts formed with air spaces between the upper edges and the bottom edge of the side wall of the head, wrist pin bosses between the cylinder-engaging parts, and the means joining said bosses and cylinder-engaging parts together, the said joining means being resiliently yielding and arranged not to engage the cylinder."

specification in interpreting the claim that "this may be done with a view of showing the connection in which a device is used and proving that it is an operative device."

Included in the other opinions of this Court on the subject is the statement in *Carnegie v. Cambria,* 185 U. S. 403, 432, as follows:

> "The claim of a patent must always be explained by and read in connection with the specification."

In *Carnegie v. Cambria* the situation was precisely identical with the question at bar and the Court of Appeals in the instant cause followed faithfully the practice of this Court in the cited case. In the cited case the claim was for a "method of mixing molten metal." The question arose as to whether this included cupola metal or blast furnace metal. It was argued that if it included cupola metal, the claim was invalid. The Court referred to the specification and found that the specification referred to the use of the process with metal tapped from different "blast furnaces," and did not contain any reference to cupola metal. Hence, the claim was interpreted in the light of the specification to refer to blast furnace metal and not cupola metal, just as the Court in the instant cause has referred to the specification to find that the webs recited in the claims are flexible.

The practice has become textbook law (see *Walker on Patents, Deller Edition,* pp. 1242 and 1243).

In the case of *Permutit v. Graver* relied upon by our adversaries, there was nothing in the specification from which to interpret the bed as being a free bed. This is apparent from the following sentence taken from this Court's opinion in that cause:

> "The free bed was neither described in the specification nor claimed in either claim 1 or claim 5."

It is very apparent that if the free bed had been described in the specification as the flexible web is described

in the Jardine specification and the blast furnace metal was described in *Carnegie v. Cambria,* this Court, in *Permutit v. Graver,* would have gone to the specification for a construction of the bed, just as this Court did in *Carnegie v. Cambria.*

Throughout the defendant's discussions and presentations in these causes there has been a persistent confusion of the rule of the construction of a claim in the light of the specification, such as stated in *Carnegie v. Cambria,* and the rule that an element cannot be read into a claim, as stated in *McCarty v. Railroad Company.* We do not know of any way the patent law could be more muddled up and bogged down than by confusion of the application of these two rules. We recognize that under the rule of *McCarty v. Railroad,* webs could not be read into the Jardine claims, but it is just as true that with the webs in the claims, the claims may be construed in the light of the specification to interpret the webs as being flexible webs. This confusion is carried by the defendants to the case of *Greenwalt v. American Smelting,* cited at the bottom of page 17 of the defendants' brief. In the case cited, the plaintiff's claims recited a hood as an element. The Court would not permit this element to be read out of the claim. We might say it did not matter whether its presence in the claims was due to an interference or to some other cause, it could not be read out of the claims any more than the webs could be read out of the Jardine claims, but that is a far cry from saying that the hood or the web could not be construed in the light of the specifications.

That this Court make a rule of law that there shall be a different standard for disclosure of a prior use than for a prior patent or publication, as defendants request, is not only contrary to the established practice, but its fal-

lacy is manifested by the contentions which defendants make in its support. It is said at the bottom of page 19 of defendants' brief that the Long piston was made in a core box and pattern which always have the same characteristics. This might be true, and yet be of no aid because all pistons are machined after being cast, and the Long piston is no exception to this rule. The ultimate characteristics of the piston are determined by the machining. Characteristics of the casting are changed by the machining. For example, as cast none of the parts are capable of being flexed or distorted or deflected. Only after the machining and cutting is concluded might these properties appear in the piston, and whether they do appear or not depends upon the kind of machining and the relation of the parts after some are cut free from others. We do not mean to say by this that webs as rigid as the Long webs could be made flexible by machining, but that webs which are as flexible as the Jardine webs may, by machining and cutting, so operate. There are many ways in which the castings made in the Long core box and pattern might have been machined and cut, and the characteristics of the resulting piston would have depended upon the kind and plan of machining and cutting. The proposed rule is unsafe also because, devices, and this is true of pistons, change in structure and operation due to wear and due to distortions and other changes resulting from exposures to heat, pressure, and the like. When one considers the making of such a general rule as this Court is here requested by defendants to make, one must think of its application to structures more subject to change and modification by time and usage than pistons for, manifestly, one rule cannot be made to apply to one device and another rule to another device. In many devices, and this is true of pistons, the characteristics of the material of which the pis-

ton is made are changed by temperature, pressure and the like. It is seldom, if ever, that a device bears the date of its manufacture and first use so that the question of its antiquity is always an open question. Moreover, such things as molds and patterns are very frequently changed as devices made by them are abandoned and other newer models made; these changes are to adapt the molds and patterns to the later models. None of these things are true of publications. Thus, it is apparent that not only should the rule proposed by defendants not be instituted, but that there is much justification for the present decisions which, if anything, place a heavier burden upon he who asserts a public use than upon he who produces a prior publication or patent.

Moreover, if this rule were to be adopted, to be consistent this Court must reverse its former opinion because, as the record shows, many pistons of the Maynard patent were made and marketed and if flexibility could be read into the webs of a piston by duplicating the commercial Maynard pistons, there would have been no need of describing the flexibility in the Maynard patent because, manifestly, if a piston, which is described, in the patent upon it as rigid, as is true of the Long piston, could be rescued from that situation by the duplication of one of the commercial Long pistons, it would not be consistent to withhold from Maynard a ruling to the same effect when his patent was silent upon the question of flexibility. It is also manifest that in the application of such a general rule a party who took out a patent in addition to commercializing his piston should not be deprived of the benefit of the rule because he took out a patent and added to the disclosure of the commercial device itself, whether it was capable of being duplicated or not.

Thus, it is apparent that there is all the more reason for applying the "strict rule" of disclosure made the law

of these causes in this Court's former decision to a prior use than to a publication or patent to which this Court applied it.

II.

Petitioner's brief p. 18.

The Court of Appeals did not decide that in order to make the Long piston an anticipation Long must have understood "the scientific explanation of the mode of operation of the Long pistons."

As a matter of fact, Mr. Long did understand "the scientific explanation of the mode of operation of the Long pistons" and described it in his patent. As we have pointed out elsewhere, flexible webs would be incompatible with and repugnant to this principle of operation which Long described. Defendants complain that the Court of Appeals accepted "the scientific explanations of the mode of operation of the Long pistons" made by Long, and here defendants ask this Court to reject Long's explanation and accept an erroneous, made-for-this-litigation hindsight theory of defendants. Moreover, "the scientific explanation of the mode of operation of the Long pistons" made by Long is consistent with the rubbing found upon Exhibit F (R. p. 1009) and is supported further by the following appearing at the bottom of page 939 of the record:

> "This particular piston head shows that the side opposite from the one bearing the exhibit tag, *has collapsed in service.* The gases have been blowing clear by the piston, as shown by the excessive carbon deposits at the bottom of the skirt under that boss. There has also been *some collapse* apparently in one of the thrust face sections, as shown by the carbon accumulation on it. There has also been *fairly hard rubbing* on one or the other thrust faces just opposite the end of one of the cross webs. So that,

apparently, this particular piston did not function properly in service." (Emphasis ours throughout unless otherwise indicated.)

It is the rigid action of the webs which caused the rubbing and the collapse. If the webs had flexed and yielded, there would neither have been rubbing nor collapse because the forces which caused the rubbing and collapse would have been ineffective to have caused either, if the webs had yielded.

We have pointed out in the statement of facts (*supra* pp. 14-26) that the Long piston, in the form shown by Exhibit F and by his patent 1872772, was so constructed (as in both the drawing of the patent and the form of Exhibit F) that the "connectors 10" (even assuming they are "webs") could not, and therefore did not, bend or yield or flex while the piston was in operation, and that this was a sufficient reason, and the probable reason, why these pistons never could be fitted in the Franklin engine with a clearance of less than 5/1000, and therefore never did solve the problem. It is for this reason alone quite unimportant to inquire into Long's knowledge of the scientific explanation," for the scientific explanation of a thing that does not happen is quite academic.

The fact that the connectors or webs of Long could be bent when the piston was not in use does not prove that Long's "scientific explanation of the mode of operation" of his pistons made by him in his patents is erroneous when the Long pistons were in use. On the other hand, this wearing affirms Long's explanation of the operation of his piston. The history of the Long piston also affirms Long's explanation of its principle of operation (R. p. 1010).

It seems to us quite obvious that any ordinary observer looking at Exhibit F, just as our expert was looking at it when he made the supposed "concession," would

understand that while the "connectors 10," might bend somewhat, depending upon the conditions of heat and tension which might develop, yet would have ample basis for positively concluding that there would be no such bending in use in view of the scoring caused by the failure of the Long webs to bend (R. p. 1009).

Petitioner's brief cites no authority, and we think there is none, for the idea that there is any difference in the character of the disclosure which is made between a written description which does not explain the non-obvious character or operation of a physical element and a physical embodiment of the device where the operation or character of a visible element is not obvious. The cases are familiar which hold that a method patent is not anticipated by an earlier device which the observer can later see might have operated according to the later patented method. (*Carnegie v. Cambria, supra.*)

So the cases hold that though the quality of an element in an earlier structure might have possessed the quality of the same element shown and described in a later patent, there is no anticipation if the quality in the earlier structure developed only accidentally or incidently and was not understood. (*Walker on Patents,* 6th Ed., Sec. 106.)

III.

There was no error in issuing the injunction against Exhibit 1.

It is familiar law that the owner of legal title to a patent, in order to obtain injunctive relief, should join an exclusive licensee but need not join licensees who are not exclusive. In spite of this rule, and in spite of the fact that the claim that the Aluminum Company of America should have been joined because an exclusive licensee was made before the Master and was overruled

by him and was by petitioners never in any form preserved for review and was never presented to the Court of Appeals upon the first hearing, petitioner is now trying to raise the point at this time in this court. Petitioner's brief attempts to disguise this situation by saying its present claim is not generally that the Aluminum Company of America is an exclusive licensee, but is specifically that Exhibit 1, which was enjoined, is an all aluminum piston and that the plaintiff has by its contract with the Aluminum Company prevented itself from making or licensing others to make an all aluminum piston under the patent in suit.

(The Master's report (pp. 11-13) would indicate that the question in the specific form was the one raised before the Master and that his conclusion involved overruling of the defendant's contention. The precise form in which the question is now attempted to be presented is therefore the precise form in which it was presented to the Master and overruled and in which ruling there was entire acquiescence from that time until defendant attempted in a few brief words to present it to the C. C. A., not in its brief upon the supplemental hearing after remand, but in its brief in separate appeals which had been taken from the final decrees then in the District Court upon the original remand from the C. C. A. to the District Court (pp. 2 and 3 in the brief in appeals Nos. 8094-96). The C. C. A. held that the point could not be considered because the question had not before been judged in favor of plaintiff and it was not open to review.)

Contrary to the representation of the defendants, there is nothing novel about the patent law proposition that the presence of the full title to a patent in a patentee is not modified by the grant of exclusive licenses to particular fields. As early as 1890 this Court, in *Waterman v. McKenzie, supra,* laid down the rule that has been

followed ever since that any license less than the entire monopoly, i.e., the exclusive right to make, use and sell for all fields and all purposes, was nothing less than a non-exclusive license, leaving the entire title in the owner of the patent who must enforce all rights under the patent. This was for the very sound reason that otherwise the owner of a patent could split the monopoly which had been granted to him up into any number of monopolies by granting an exclusive license to each of any number of fields of use. For example, as we have said, if the rule of law which the defendants urge this Court to follow in Section III of their brief were accepted, Aluminum Company of America would have an exclusive monopoly for aluminum pistons and The Cleveland Trust Company could grant an exclusive right and monopoly to another for the iron piston field and to another for the nickel piston field, and so on, *ad infinitum*. This the Supreme Court said would put the patentee in the business of granting monopolies, a function reserved by the Congress for the Commissioner of Patents. The change in this rule which defendants urge would cause limitless confusion and muddle in the patent practice.

CONCLUSION.

There being no basis in this Court's practices for the granting of the petition and it being demonstrated that it is unwise to make the bad law which defendants ask, we think the petition should be denied.

Respectfully submitted,

ARTHUR C. DENISON,
F. O. RICHEY,
WM. C. MCCOY,
MILTON TIBBETTS,
Attorneys for Plaintiffs-Respondents.

BLANK PAGE

BLANK PAGE

FILE COPY

FILED
OCT 1 1940
CHARLES ELMORE CROPLEY
CLERK

In the Supreme Court of the United States

October Term, 1940.

No. 9.

THE SCHRIBER-SCHROTH COMPANY,
Petitioner,
vs.
THE CLEVELAND TRUST COMPANY,
CHRYSLER CORPORATION,
Respondents.

No. 10.

THE ABERDEEN MOTOR SUPPLY COMPANY,
Petitioner,
vs.
THE CLEVELAND TRUST COMPANY,
CHRYSLER CORPORATION,
Respondents.

No. 11.

THE F. R. ROWE SALES COMPANY,
Petitioner,
vs.
THE CLEVELAND TRUST COMPANY,
CHRYSLER CORPORATION,
Respondents.

RESPONDENT'S BRIEF.

A. C. Denison,
F. C. Ehlert,
Wm. C. McCoy,
Hoyos Fleming,
Counsel and Solicitors for Respondent.

The Werner Printing & Lithographing Co., Cleveland, Ohio

BLANK PAGE

INDEX.

The issue here has become, and now is, unimportant and moot, so far as the public interest is concerned. 1

The public is not interested or concerned about which of the contending parties is awarded the Three Dollars ($3.00) 3

Aluminum Company of America..... 3

"Patent Pools" 5

"Sins of the Past"..... 6

(A) What was the practice followed in administering the patent law in the past?..... 7

(a) The history of an invention..... 8

(b) Achievement 12

(c) Presumptions of Validity and the Presence of Invention..... 14

(B) What was the result on progress of peoples, science and invention under these rules, promulgated and applied by this and other patent Courts before it was discovered that they were "the sins of the past"; succinctly what was the "wages" of "the sins of the past"..... 15

Conclusion on the Subject of the "Sins of the Past" 18

Certain Fundamental and Salient Rules of Patent Law Ought to be Preserved..... 20

No Prior Art Piston Could Operate at the Essential Minute Clearance..... 20

No Prior Art Device Supports and Divides Its Parts to Permit Deformation of Certain Parts Without Interfering With the Essential Functions of the Parts 21

No Prior Art Device Discloses Flexible Web or Web Flexibility: Jardine First Disclosed These Features 24

To Invalidate or Negative a Success on a Failure..... 26

"Smartness" of Petitioners' Brief 27
(a) Jardine described flexible webs; Long did not ... 27
(b) Court of Appeals on Long 28
(c) Public adoption and commercial use of Jardine 29
(d) Flexible webs not read into the claims 29
(e) Hartog 30
(f) Court of Appeals found Jardine's invention in his combination 30
(g) Jardine always claimed to have invented a piston combination including flexible webs 30
(h) Ricardo did not have Jardine's combination; it was a failure 31
(i) Status of Maynard changed by this Court 31
(j) Ricardo use just enough to prove its insufficiency 32
(k) Court of Appeals held Long did not solve the problem and lacked identity 32
(l) 33
(m) 34
(n) 34

ARGUMENT ON PETITIONERS' SPECIFICATION OF ERRORS.

POINT I 35
(a) The Court of Appeals did not treat "flexing webs" as essential elements of the Jardine patent; they treated webs as essential elements whether they were flexible or the equivalent thereof 36
(b) Webs which are flexible, as stated in the specification, are recited in the claims; the Court of Appeals did not read "flexing webs" in the claims, but construed the webs in the claims as flexible in the light of the specification 42

(c) Webs that would flex were not surrendered during the prosecution of the application, nor were "flexing webs" so surrendered, if that makes any difference. What were surrendered during the prosecution of the application were combinations of elements different from the combinations which were preserved..... 43

(d) The Court of Appeals did not refuse to follow the decisions of this Court, but was meticulous in its effort to follow the most recent decisions of this Court, and particularly this Court's first decision in this litigation, wherein this Court overruled the Court of Appeals..... 45

Hartog and Jardine..... 48

The webs of Exhibit 1 are flexible..... 53

POINT II—THE LONG PISTONS AND THE COURT OF APPEALS' VIEWS WITH RESPECT THERETO.... 54

(1) The first defense against Long..... 54

(2) The second ground upon which the Court of Appeals rejected Long..... 56

(3) The third ground upon which the Court of Appeals rejected Long..... 57

(4) The 1921 Long Piston..... 58

(5) Lack of identity and failure..... 58

(6) Long piston and its failure at .002" clearance... 58

(7) The question of the Long Exhibit F disclosure. 70

(8) Re the Unwinding of the Double Negative..... 77

(9) Long commercial piston..... 83

Petitioners' Inconsistency on this Review and on the Former Review..... 84

POINT III—WHETHER THE ALUMINUM COMPANY OF AMERICA SHOULD HAVE BEEN JOINED AS A PARTY PLAINTIFF FOR INJUNCTIVE RELIEF IS THE ONLY DOUBTFUL QUESTION IN THIS CAUSE 86

The Jardine Invention and the Jardine Patent..... 89
Jardine Operations and Results..... 91
The Jardine Patent..... 95
Conclusion on Jardine's Invention and Patent..... 98
Gulick and Jardine..... 99
Franquist and Jardine..... 99
Ricardo and Jardine..... 100
Schmiedeknecht and Jardine..... 100
Pomeroy and Jardine..... 100
CONCLUSION..... 101
APPENDIX A—Affidavit of William C. McCoy..... 102

AUTHORITIES CITED OR DISTINGUISHED.

Cases.

Altoona v. Tri-Ergon, 294 U. S. 477.....50, 51
American Fruit v. Brogdex, 283 U. S. 1..... 38
Armstrong v. United Cork, 107 Fed. (2) 36..... 7
Carnegie v. Cambria, 185 U. S. 403..... 37
Cawood Patent, 94 U. S. 695..... 24
Coffin v. Ogden, 18 Wall. 120; 85 U. S. 120.....27, 70-71
Consolidated v. Crosby, 141 U. S. 441..... 100
Daugherty v. Vickers, 80 Fed. (2d) 809..... 87
Dean v. Killian, 106 Fed. (2) 316 (C. C. A. 8)..... 15
De Forest v. G. E., 283 U. S. 664.....72, 73, 74, 75
Downton v. Yeager, 108 U. S. 466..... 24
Eames v. Andrews, 122 U. S. 40.....24, 72, 74, 75
Expanded Metal v. Bradford, 214 U. S. 366.....8, 43, 44
Gairing v. Eclipse, 48 Fed. (2) 73 (C. C. A. 6)..... 15

Gayler v. Wilder, 51 U. S. 477 ..... 28, 76, 99
Gordon v. Walcott, 32 Fed. (2) 55 (C. C. A. 6) 14
Grove v. Brewer, 103 Fed. (2) 175 (C. C. A. 1) 69
Hawkinson v. Carnell, 112 Fed. (2) 396 (C. C. A. 3) 87
Hogg v. Emerson, 52 U. S. 587 38
Kaiser v. General, 171 Fed. 432 87
Keller v. Adams-Campbell, 264 U. S. 310 3
Keystone v. Adams, 151 U. S. 139 6
Layne & Bowler v. Western, 261 U. S. 37 3
Leeds & Catlin v. Victor, 213 U. S. 325 43
Louisiana v. Mississippi, 282 U. S. 458 69
Machine Co. v. Murphy, 97 U. S. 120 ..... 21, 49
The Marsodak, 94 Fed. (2) 339 (C. C. A. 4) 69
McCarty v. Railroad Company, 160 U. S. 110 ..... 36, 39, 41, 50
McClain v. Ortmayer, 141 U. S. 419 6
Midland v. Bobbitt, 70 Fed. (2) 416 (C. C. A. 8) 69
Mumm v. Decker, 301 U. S. 168 ..... 14, 15, 27
N. Y. Trust v. Eisner, 256 U. S. 345 9
Paramount v. Tri-Ergon, 294 U. S. 464 ..... 9, 48
Permutit v. Graver, 284 U. S. 52 39
Peters v. Bates, 295 U. S. 392 89
Radio v. Emerson, 296 Fed. 51 (C. C. A. 2) 87
Radio v. Radio, 293 U. S. 1 14
Scaife v. Falls City, 209 Fed. 210 41
Seymour v. Osborne, 11 Wall. 516 24
Seymour v. Osborne, 78 U. S. 516 38
Smith v. Hall, 301 U. S. 216 ..... 6, 69, 72
Smith v. Snow, 294 U. S. 1 ..... 6, 9, 38, 48, 51
Temco v. Apco, 275 U. S. 319 9

U. S. v. Dubilier, 289 U. S. 178 16
U. S. v. Esnault, 303 U. S. 26 6
U. S. v. Societe, 224 U. S. 309 ..... 36, 96
Waterman v. MacKenzie, 138 U. S. 252 87
Waxham v. Smith, 294 U. S. 20 6
Western v. Patent, 42 Fed. (2) 116 (C. C. A. 2) 87
White v. Dunbar, 119 U. S. 47 ..... 36, 39

Texts.

Francis Bacon 16
17 *C. J.*, Sec. 707, *et seq.* 39
Hooton, "Twilight of Man," pp. 24, 25, 36 ..... 16, 90
Abraham Lincoln 17
Walker on Patents, Deller Edition, pp. 1204, 1205-1207, 1209-10 37

In the Supreme Court of the United States

October Term, 1940.

No. 9.

THE SCHRIBER-SCHROTH COMPANY,
Petitioner,
vs.
THE CLEVELAND TRUST COMPANY,
CHRYSLER CORPORATION,
Respondents.

No. 10.

THE ABERDEEN MOTOR SUPPLY COMPANY,
Petitioner,
vs.
THE CLEVELAND TRUST COMPANY,
CHRYSLER CORPORATION,
Respondents.

No. 11.

THE F. E. ROWE SALES COMPANY,
Petitioner,
vs.
THE CLEVELAND TRUST COMPANY,
CHRYSLER CORPORATION,
Respondents.

RESPONDENT'S BRIEF.

The issue here has become, and now is, unimportant and moot, so far as the public interest is concerned.

We think we should make, based on the affidavit of William C. McCoy, printed in Appendix A hereof, as we do, and without fear of contradiction, the following representations which find no support in the original record

because the facts in the representations have occurred since the trial. We present them here because they relate to and nullify the reasons for granting certiorari in these causes;

Of the several devices charged to infringe, the Court of Appeals held that the piston Exhibit 1 alone infringed (Exhibit 1 is illustrated at P. B.* p. 15). This device has become obsolete since this suit was tried. Though it was made and used in tremendous quantities, it has "had its day," like the bow and arrow, the square rigged sailing ship, and the muzzle loading gun.

No automobile or internal combustion engine made in the Sixth, or any other Circuit, is using Exhibit 1 as original equipment. A few only of these Exhibit 1 pistons are now made and sold to replace original equipment. None of these are being made in the Sixth Circuit except a few made by respondent's licensees for replacement purposes. We understand that a few others are making them in the Ninth Circuit for replacement purposes. Even this limited production is waning and will continue to wane and terminate when and as the cars in which these pistons were originally installed go to the scrap pile. Much of this supplanting of Exhibit 1 has been, is, and will be, done by pistons of one of more of the types held not to infringe the Jardine patent (Exhibit 3-O, for example).

Hence, these causes are of no public interest. The public is no longer interested in what is done about Exhibit 1. On the other hand, these causes have developed into a private fight between the respondent, on the one hand, and the petitioners and their patron, on the other hand, for One Dollar ($1.00) per law suit or a grand total of Three Dollars ($3.00) for the three causes (R. pp. 106, 170 and 216).

---

* In this brief we refer to Petitioners' Brief as P. B., to Supplement to Petitioners' Brief as S. P. B., and to Respondent's Brief as R. B. Chrysler Corporation was made a party plaintiff because of its interest in the Maynard patent, now not in suit.

The public is not interested or concerned about which of the contending parties is awarded the Three Dollars ($3.00). Even injunctive relief, if any is to be granted ultimately in view of what the parties say in the portions of their brief entitled Point III (P. B. pp. 57-59; R. B. pp. 86 to 89), retains a minimum of importance in view of this piston's present status.

Under the circumstances dismissal of the certioraris is justified under the practice in *Keller v. Adams-Campbell*, 264 U. S. 310; *Layne & Bowler v. Western*, 261 U. S. 37.

If, in these premises, the right to injunction against the making, using and selling of obsolete pistons, headed for the museum like many another important invention that served man in its turn and time, is of any importance as to the propriety of certiorari, then we suggest that this Court next consider the question of the right to injunctive relief discussed in Point III of each of the briefs of the parties and, if this Court agrees with petitioners that the respondent is not entitled to injunctive relief, then what possible interest can the public have in which of the litigants would get the Three Dollars ($3.00)? Certainly the time of this Court should not be consumed over a matter involving such a trifle.

Aluminum Company of America: On all occasions during this litigation, our adversaries have mentioned the name of the Aluminum Company of America, sometimes even going so far as to discuss questions concluded and abandoned by them in the lower Court in order to parade the name of the Aluminum Company in this litigation. In view thereof the Court of Appeals included in their opinion a footnote (108 Fed. (2) 114) which could have had no other purpose than to rebut any inference or conclusion that that Court was in any way swayed by these frequent and devious references to the Aluminum Company, the pending anti-trust litigation, or the current newspaper

comments against the Aluminum Company. Since we are under no obligations to temporize about this manifest effort to influence the issues in this case by these tactics (as perhaps was the Court of Appeals), we say we have no doubt about the purpose of these tactics, and in view thereof, we say emphatically that, as is true of all cases of this kind, the invalidating of the Jardine patent would be a distinct advantage to the Aluminum Company over the smaller companies, who are licensed under the Jardine patent. This is not only commonly known in general history in industry, but is consistent with the purposes of the pending litigation by the Department of Justice against the Aluminum Company. To our own knowledge in a number of cases small companies who, under patent protection, were successfully competing with larger companies, have not only lost their business, but have been extinguished, when the patents were invalidated or limited to impotency, and competition became open, so that, the large company could take full advantage of its largeness. One of the complaints against the Aluminum Company is that it possessed all of the advantages of any large company and, in addition, it possessed the advantage of being, if not the sole, at least the largest, producer of virgin aluminum, so that it could sell pistons, and what not, at cost and depend solely upon its profit on the raw material for its advantage. It results that not only is a conclusion that the validating of the Jardine patent would aid the Aluminum Company not justified by history, but such a conclusion is repulsed by the bases of the proceedings of the Department of Justice against the Aluminum Company. It follows that the conclusion which our adversaries solicit and which the Court of Appeals felt compelled to rebut, would be erroneous if accepted and that, in fact, just the contrary is the truth. The Aluminum Company could not make the Jardine piston (even if it were still marketable) except on paying a royalty in which all the Cleveland Trust Company beneficiaries share.

"Patent Pools": Frequent reference is also made by our adversaries to the plaintiff's ownership of a group of piston patents; often, by way of attempted derogation, the term "patent pool" is used. The plaintiff, as trustee, holds the title to certain patents, most of which are unimportant and many of which were purchased from the inventors who would otherwise have suffered total loss. These patents are held in the interest of certain individual inventors, certain relatively small companies and of the Aluminum Company of America, which owns a minority interest in the Trust Estate. The so-called "patent pool" was, as far as history in this country goes, first instituted to prevent the invention of the sewing machine by Elias Howe from causing bankruptcy and ruin, and to consummate the reward which was promised him under the patent laws, but which the Courts failed to consummate for him without the aid of the "pool." Since then these so-called "patent pools" have been organized and administered for the same purpose. The need exists today more than ever where the expense of litigation has been increased by such practices as moving the standard of invention around, apparently more or less at random, until it is beyond the purse of individual inventors to realize upon the patent grants which have been extended to them under the laws of Congress, and where the position of the standard of invention is so changed during the litigation that what promised to be a reward and a success at the beginning of the litigation turns out to be a penalty and a disaster in the end. It is true that in many cases the individual inventors must get in the same boat with those at whom people like our adversaries direct their disapproving darts.

It results that if the minority interests of the Aluminum Company of America in this patent property is thought to be improper, hard cases should not make poor law.

Moreover, if the "patent pool" is so objectionable and its presence makes out such a "hard case" as justifies the

making of bad law and ignoring the facts, as this Court is here asked to do, then Congress will, or would, have passed some of the many laws proposed to it to deal with these "patent pools." Since there have been many such proposed to Congress in recent years and none have been passed, it would seem that Congress has concluded that there is no need for a law directing such revolutionary measures as are here proposed that this Court take in order to deal with the dragon petitioners pretend to visualize in this cause.

"Sins of the Past": The issues here relate directly to, or depend upon, the question of invention as distinguished from mechanical skill, since the Jardine claimed combination is not in the prior art and the technical questions raised are such as have been resolved in favor of a meritorious invention under the authority of this and other Courts (*Smith v. Snow,* 294 U. S. 1, 14; *Keystone v. Adams,* 151 U. S. 139, 144, 145; *McClain v. Ortmayer,* 141 U. S. 419, 425). Since this Court, where both validity and infringement are in issue, has not held a patent valid and infringed in over twelve years,* the Courts of Appeals have assumed that the standards of invention have been raised by this Court and such Courts of Appeals are now in confusion as to where that standard now is or ultimately will be rested, since it has been dislodged from its former anchorage. In the instant cause, for example, the Court of Appeals had occasion to comment on this in its second opinion (108 Fed. (2) 112) and to note the same kind of comment by the Court of Appeals in the Second Circuit at 77 Fed. (2) 274, 276. In so doing the Court of Appeals below com-

---

* The patent in *Smith vs. Snow,* 294 U. S. 1 and in *Waxham vs. Smith,* 294 U. S. 20, was held invalid in *Smith vs. Hall,* 301, U. S. 216. *U. S. vs. Esnault,* 303 U. S. 26 was from the Court of Claims and this Court noted that the review of this Court was precluded and restricted by an Act of Congress.

mented that it held to the view that its opinion in this case, now under review, conformed to the present standards of invention as set by this Court and was paralleled by a co-extensive conclusion of the Court of Appeals in the Second Circuit in the cited case. In the Third Circuit the Court of Appeals in the recent decision of *Armstrong v. United Cork* (107 Fed. (2) 36) noted this change of standards and, speaking through Judge Clark, likened the situation to the moving back of the target in artillery practice. After citing many recent decisions of this Court on that subject, and in attempting to apply that Court's interpretation of the present locus of this standard of invention, as set by this Court, Judge Clark felt called upon to refer to the administration of the patent law prior to the change as "the sins of the past" (the exact words are: "We, therefore, express to them" (i.e., counsel and clients) "our regret for the sins of the past") (107 Fed. (2) 37). Since the present locus of this standard of invention is at the threshold of and determinative of this case, it behooves us to state in the beginning of this brief, (A) what were these "sins of the past" and, (B) the results, or "wages" of those "sins of the past" upon the laudable purpose of promoting invention, science and human progress in general which was the purpose of the Constitution, the patent laws and the result of the administration thereof in the "past."

(A) What was the practice followed in administering the patent law in the past?

In the administration of the patent law by this and the other patent Courts in the "past," the "standard of invention" was rooted in and resolved on the evidence upon three questions, the first of which was (a) the history of the invention in the industry, the second was (b) the achievement of the invention, and the third (c) was the presumption of validity which attaches to the public grant.

All collateral matters such as judicial hunches, simplicity, "the hindsight of wiseacres," were condemned and eschewed in weighing the question of invention.

(a) The history of an invention, sometimes referred to as evidence, criteria, or symptoms of invention, included such evidence as related to an urgent need or want long existing, a problem demanding solution, prior effort and failure of others skilled in the art to supply the need and solve the problem, public adoption, public acquiescence and commercial success of the invention under such circumstances as to warrant the conclusion that success was due to the invention, persistent infringement in the face of litigation, long standing of the invention as a solution, simplicity, and substantial duplication by the infringer with no further departure than substitution of equivalents. The use of this evidence was generally predicated upon the proposition that it constitutes the tribute and the testimony of the industry to which the invention relates regarding its merit and its title to recognition as an invention. Many of the Courts had no hesitancy in expressing themselves as saying that such a collective tribute of the industry was a safer guide on the question than was what moved in the bosom of the Court, too often insufficiently informed regarding the mechanical and scientific principles involved in the case. The decisions of this Court in which this healthy rule has been followed are ancient, intermediate and current, as exemplified by the following excerpts from decisions of this Court at various times.

In *Expanded Metal v. Bradford,* 214 U. S. 366, 381, this Court in dealing with prior symptoms of invention said:

> "It may be safely said that if those skilled in the mechanical arts are working in a given field, and have failed, after repeated efforts, to discover a certain new and useful improvement, that he who first makes the discovery has done more than make the obvious im-

provement which would suggest itself to a mechanic skilled in the art, and is entitled to protection as an inventor."

In *Temco v. Apco*, 275 U. S. 319, 324, this Court in dealing with after symptoms said:

"The district judge in Ohio in the *K-W Ignition Co.* case was affected in his decision that the Thompson patent involved invention, by the way in which the public eagerly took it and its marked success, and so, indeed, was the Circuit Court of Appeals of the Sixth Circuit. So are we."

The dominance of history over "hindsight" was expressed generally in *N. Y. Trust v. Eisner*, 256 U. S. 345, 349, thus:

"a page of history is worth a volume of logic."

Thus, in *Paramount v. Tri-Ergon*, 294 U. S. 464, the Court said (p. 474):

"Where the method or device satisfies an old and recognized want, invention is to be inferred, rather than the exercise of mechanical skill. For mere skill of the art would normally have been called into action by the generally known want. See *Loom Co. v. Higgins*, 105 U. S. 580, 591; *Krementz v. Cottle Co.*, 148 U. S. 556, 560; *Hobbs v. Beach*, 180 U. S. 383, 392; *Carnegie Steel Co. v. Cambria Iron Co.*, 185 U. S. 403, 429, 430; *Expanded Metal Co. v. Bradford*, 214 U. S. 366, 381."

In *Smith v. Snow*, 294 U. S. 1, the Court said (p. 14):

"If the matter were doubtful, it is plain from what has been said that the character of the patent and its commercial and practical success are such as to entitle the inventor to broad claims and to a liberal construction of those which he has made. *Moreley Machine Co. v. Lancaster*, 129 U. S. 263, 273-277; *Eibel Co. v. Paper Co.*, 261 U. S. 45, 63; *Winans v. Denmead, supra*, 341. In such circumstances, if the claim were fairly susceptible of two constructions, that should be adopted which will secure to the patentee his actual invention,

rather than to adopt a construction fatal to the grant, *Keystone Manufacturing Co. v. Adams*, 151 U. S. 139, 144, 145; *McClain v. Ortmayer*, 141 U. S. 419, 425."

All of this history and all of these evidences, criteria or symptoms of invention have been found to be present in the instant case by each of the Courts below (Master's Report, R. p. 1182, affirmed by the District Court). The Court of Appeals summarized the situation in its second opinion in this case as follows (108 Fed. (2) p. 112):

> "In the conviction that the long search for a solution of the aluminum piston problem by engineers of great ability, their repeated failures, and the ultimate success of the Aluminum Company's commercial device point with persuasiveness to the fact that somewhere in the search one, with the spark of genius denied the skilled mechanic, contributed to the art the thought that brought achievement out of failure, we reconsider the Jardine patent,"

and (108 Fed. (2) 111):

> "we were greatly impressed by the story disclosed by the record of the long search and sustained effort on the part of exceptionally competent automotive engineers to completely solve the problem of a successful aluminum piston operating freely with minute clearances in an iron cylinder. There had been advances, 'foreshadowing,' perhaps, that solution would not always defy inventive genius, though on the whole the aluminum piston as heretofore noted had received a 'black eye' in the industry."

A more lengthy statement in the first opinion of the Court of Appeals (92 Fed. (2) 334, 335; S. P. B. pp. 6-8) culminated in the following:

> "Long recognition of an existing problem in any art, and the advantages to accrue to an industry from its solution, coupled with repeated failures to find solution, has ever been considered as highly persuasive of invention when success is finally attained. Sometimes achievement is revolutionary, an abandonment of all

previous approaches, and the charting of a new way to the goal. More often the inventor begins where others leave off, and perceives the vital forward step to which predecessors had been blind. Even then success may not be fully recognized until the world gives acclaim.

"The present record is conclusive of the long unsuccessful search for a light weight piston sufficiently durable to obviate the well-known disadvantages of the iron trunk piston in high speed engines. There was much research and experimentation by those most highly skilled, including the engineers of the Aluminum Company, Colonel Vincent of the Packard Motor Car Company, one of the designers of the Liberty engine, and the engineering staff of the Franklin Automobile Company, under the direction of the defendants' expert Stellman, its Chief Engineer."

* * * * *

"It is, of course, axiomatic that commercial success is not of itself conclusive upon the question of novelty or invention, and where such success is fairly attributable to other causes, such as the reputation of the manufacturer, his extensive advertising and superior salesmanship, it will be wanting in persuasiveness. But where no alternative inferences are to be drawn, commercial success is highly indicative of invention. This is so in the usual case where the test of success is acceptance by the public. But it must be here noted if not elsewhere observed, that where success follows acceptance by experts rather than by those unskilled, it is of far greater tribute to the ingenuity of the inventor. It is clearly demonstrated upon this record, if indeed it is not within the field of general knowledge, that the automotive industry i acceptance of new devices upon which success of highly complicated and delicate machinery in the hands of inexpert users must depend, exercises the greatest caution, and things new, whatever their theoretical virtue, will not be considered until they have been subjected to the most rigorous practical tests for efficiency and durability. This must be so when failure of one year's product may bring tremendous losses or complete disaster."

(b) Achievement: The modern inventor stands at a disadvantage as against the inventor of the period of these "sins of the past" due to the moving of the boundaries of the knowledge of science and invention ever and ever further beyond the ken of the public, including even the professional classes. Inventions have been both more difficult to understand and less spectacular. For example, as is well known, the inventions by Alexander Graham Bell and Thomas A. Edison were simple as compared with such inventions as are covered by the Jardine patent. The problems were simpler and the means of solving them were simple, but they were more spectacular in that the public in general could understand the achievement, if not the nature, of the solution. Today such involved problems as that which confronted Jardine are solved and the solution is put into use without the public knowing anything about it or being able to understand it, if it were brought to their attention. The consequences of such inventions come quietly and more or less unobserved to the public. The new piston causes the engine to run smoother, to last longer, to consume less fuel, to shake off many of its ills, to need less attention and repair, to operate with greater efficiency, and constitutes the basis of new designs of engines of higher speeds, etc., all of which result from the original achievement of Jardine's invention (R. pp. 466, 467, 1069 and 1070).

The Courts below all concur in the difficulty of the problem which confronted Jardine, its solution and its achievement. These things are catalogued and discussed by the Court of Appeals in the following excerpts from its opinions.

At 92 Fed. (2) 332:

> "Cylinders were, and generally still are, cast of iron, and prior to the period we are here considering pistons were likewise so cast. The disadvantages in this organization were early recognized. Since iron is

a poor conductor of heat, the particles of carbon that would form on the piston head would become overheated and cause premature explosion in the combustion chamber. Iron is also heavy, and with the great acceleration of piston reciprocation, due to the ever increasing demand for speed, the industry began to cast about for expedients to lighten the pistons. *There were numerous efforts and failures* in this respect with the conventional iron trunk piston. Lighter metals were considered, but since strength and durability to withstand the great force of rapid explosions upon the piston head and the powerful thrust imparted to its bearing faces by the power stroke of the piston as it imparted energy to the crank shaft were prerequisites, the art was limited to metal that was both strong and durable. It turned, therefore, quite naturally and inevitably, to aluminum. *A new and for a long time seemingly insuperable problem* at once confronted the automotive engineers, due to the fact that the coefficient of expansion differs greatly in the two metals, and that under heat aluminum will expand much more rapidly than iron. Since the desirable clearance is minute, approximating one one-thousandth of an inch, it was at once clear that an aluminum piston, installed when cold with required clearance in an iron cylinder, would, when heated by operation, seize, and that a piston with clearance sufficient to avoid seizing would waste power, pump oil, cause undesirable noises and lack durability.

"Ingenious, numerous, and varied were the expedients resorted to in an effort to achieve the clearly recognized advantages of aluminum pistons, while at the same time avoiding troublesome results, and equally numerous were the failures, by reason of which a prejudice had developed in th industry against them, and it was said they had had a 'black eye.'" (Emphasis ours throughout unless otherwise indicated.)

At 108 Fed. (2) 113:

"Jardine is also the first to refer specifically to an 'aluminum alloy piston,' and he states that one embodying his invention 'can be fitted to the engine cylinder with a very small clearance, and that compensa-

tion for the relatively large thermal expansion of the guide section of the piston is provided by the displacement of the guide segments which results from the reaction force of the cylinder wall on the outer faces of the guides.' "

(c) Presumptions of Validity and the Presence of Invention: This rule of law was stated recently by Mr. Justice Hughes in the case of *Mumm v. Decker,* 301 U. S. 168, 171, as follows:

> "The issue of the patent is enough to show, until the contrary appears, that all the conditions under which a discovery is patentable in accordance with the statutes have been met. Hence, the burden of proving want of novelty is upon him who avers it. *Walker on Patents,* Sec. 116. Not only is the burden to make good this defense upon the party setting it up, *but his burden is a heavy one, as it has been held that 'every reasonable doubt should be resolved against him.'* Id., *Cantrell v. Wallick, supra; Coffin v. Ogden,* 18 Wall. 120, 124; *Barbed Wire Patent,* 143 U. S. 275, 284, 285; *Adamson v. Gilliland,* 242 U. S. 350, 353."

The same rule is stated by Mr. Justice Cardozo in *Radio v. Radio,* 293 U. S. 1, 6.

As indicated by the citations by Mr. Chief Justice Hughes, the rule is of ancient and frequent application.

In the instant case the patent and claims were issued and granted by the Patent Office after a long and careful prosecution which included several Patent Office interferences, during which the prosecution proceeded *inter parties* (*Gordon v. Walcott,* 32 Fed. (2) 55 (C. C. A. 6) (See the list at page 7 of petitioners' brief), including Long, Hartog and Gulick. During the prosecution the art relied upon here was cited and considered by the Patent Office in *inter partes* proceedings. Thus the claims in suit were allowed by the Patent Office as distinguishing from the very art petitioners rely upon here. By all authority the presump-

tion of validity arising from the grant as stated in *Mumm v. Decker, supra,* is greatly reinforced and strengthened by the much more careful consideration given the case in the Patent Office under these circumstances (*Dean v. Killian,* 106 Fed. (2) 316 (C. C. A. 8) and *Gairing v. Eclipse,* 48 Fed. (2) 73 (C. C. A. 6)).

(B) What was the result on progress of peoples, science and invention under these rules, promulgated and applied by this and other patent Courts before it was discovered that they were "the sins of the past"; succinctly what was the "wages" of "the sins of the past."

In the report of the Monopoly Investigating Committee of the Congress of the United States there appears the following excerpts relating to the American patent system and its administration in the past:

"1. There seems to be a general agreement by these witnesses, as well as by those who previously testified at the Department of Justice hearing some weeks ago, *that inventors and business still need the protection and stimulation of patents.*"

* * * * *

"*the patent system has been of inestimable benefit to the country in promoting industrial and scientific development, and may be regarded as one of the principal causes of American industrial supremacy,*"

* * * * *

"(6) The fact that patents are keystones in many very important industries has been brought home to us with great emphasis. I doubt whether I had realized their significance as a primary force in the operations of the economic system."

* * * * *

"(7) *There was practically unanimous agreement among the witnesses that Congress, by the enactment of the patent law, has given this country a system far superior to that which exists in any other country.*"

The following is a statement by Mr. Justice Roberts, speaking for this Court in *U. S. v. Dubilier*, 289 U. S. 178, 186:

> "* * * An inventor deprives the public of nothing which it enjoyed before his discovery, but gives something of value to the community by adding to the sum of human knowledge." (Citing cases by the Supreme Court.)

In the recent work entitled "Twilight of Man" by the great anthropologist, Professor Hooton of Harvard University, the following tributes are paid to invention and its importance which, as all admit, has been greatly encouraged and increased by the administration of the patent law during the period when liberality was shown to the inventor (p. 36):

> "There followed the one stupendous triumph of animal genius beside which all subsequent human creations pale into insignificance—*the invention of tools.*"

(pp. 24 and 25):

> "It is almost treasonable to argue in this democratic society that social, material, and intellectual progress has never been a communal achievement—a sort of immaculate conception of the group mind—but always the result of the effort of the gifted individual."
>
> * * * * *
>
> "Civilization has advanced in my opinion, not because of any improvement of mental quality in the masses within the last ten thousand years, but rather because the realization of the material advantages to be gained from the toleration of genius has slowly percolated into the torpid minds of the majority of our species."

Francis Bacon gave the weight of his opinion to views somewhat similar to the foregoing. The following is a translation of one of his Latin paragraphs:

> "The introduction of great inventions appears one of the most distinguished of human actions, and the

ancients so considered it for they assigned divine honors to the authors of inventions, but only heroic honors to those who displayed civil merit such as the founders of cities and empires, legislators, the deliverers of their country from lasting misfortunes, the quellers of tyrants, and the like. And if any one rightly compare them, he will find the judgment of antiquity to be correct; for the benefits derived from inventions may extend to mankind in general, but civil benefits to particular lands alone; the latter, moreover, last but for a time, the former forever. Civil reformation seldom is carried on without violence and confusion, while inventions are a blessing and a benefit without injuring or afflicting any."

On the subject Abraham Lincoln said:

"*Next came the patent laws.* These began in England in 1624, and in this country with the adoption of our Constitution. Before then any man (might) instantly use what another man had invented, so that the inventor had no special advantage from his invention. The patent system changed this, secured to the inventor for a limited time exclusive use of his inventions, and thereby added the fuel of interest to the fire of genius in the discovery and production of new and useful things."

Though the first patent laws began in 1624 the admintration of them was a failure up until roughly about 1824, hence little progress was made until after the beginning of the Nineteenth Century. The laws were good, but the administration of them between 1624 and 1824 did not stop invention stealing and the inventor would not spend his substance and his time producing property to be stolen at will and at random any more than anybody else. He did not, and invention from 1624 to 1824 was sparse and scattered. Only when the stealing of Eli Whitney's cotton gin invention by Southern planters incited the public to demand a fair administration of the patent law was it that fair administration was instituted.

Any careful student of history appreciates that the administration of the American patent law characterized by Judge Clark as "sins of the past" began a little over one hundred years ago and continued up until roughly twelve years ago. During that period, to common knowledge, progress and the science of invention and human advancement generally so outstripped all other periods as to almost, if not entirely, surpass all previous achievements towards human betterment and progress. Although the public is cognizant of only the spectacular inventions made during that period, much towards this progress was contributed by the less spectacular and often less important inventions; for example, underneath the invention of the steam boat, telegraph, locomotive, sewing machine, electric light, the phonograph, the telephone, the automobile, the radio and the aeroplane were a whole host of these less spectacular, but perhaps equally important, inventions such as nail-making machines, glass-molding machines, well-boring machines, etc., including metallurgical, chemical and electrical processes too involved to be understood by the public, but the achievements of which were as necessary to progress as the spectacular inventions.

Conclusion on the Subject of the "Sins of the Past": We are, therefore, confronted here in 1940 with the proposition of whether we are to adhere to, or rather not depart substantially from, a policy, incorrectly characterized as the "sins of the past," which was initiated a little over one hundred years ago in the United States and has been partly responsible for the initiation and continuation of the most brilliant period in human history. A continuation of a policy which sets the standard of invention so high as to compel a decision against the patentee in almost every case, can have no other influence than a disastrous one upon the encouragement of invention, and can have no other effect than the reverse of the effect which initiated

the great period of invention and progress over one hundred years ago and continued it; it can have no other effect than in the end to destroy inventive effort. We are well aware that a movement of such magnitude and importance will be carried by inertia forward for a certain number of years even after those influences which initiated and fostered it have been withdrawn. Already this policy has had the effect of reducing the number of, if not eliminating, individual free-lance inventors of the type of Edison and Bell. Already it has had the effect of greatly reducing the number of smaller corporations which started up and prospered during their incubation period under patent protection. Already it has had the effect of driving inventive work to the research laboratories of the big companies who can depend for protection upon their bigness rather than upon favorable Court holdings on their patents. It is apparent that these big companies will not long continue to spend their time and money in pioneering and developing inventions if they are at once dedicated to anyone and everyone who chooses to copy them. Manifestly, they will not continue long because they cannot. Pioneering in inventing is expensive and one who engages in it cannot compete with one who does not, but nevertheless gets all the benefits of it, just the same as happened in the Seventeenth and Eighteenth Centuries.

In view of these things it is our position that the administration of the patent law during the past, to which Judge Clark referred, was not "sinful," but wise and virtuous, and ought to be continued.

That the invention of Jardine responds to all of the tests of invention applied during that period is concurred in by all of the Courts below. The only difference on the subject of invention in the Courts below is the confusion which exists today over where the standard of invention is to be planted, now that it is conceded that it has been dislodged from its former base by the recent decisions of this

Court, to which we refer and to which the Courts of Appeals in the Second, the Third and the Sixth Circuits have referred in the decisions which we have cited.

Certain Fundamental and Salient Rules of Patent Law Ought to be Preserved, no matter what former rules or standards have been destroyed or modified in the target moving which has been so great as to suggest the conclusion of Judge Clark. Such rules, for example, are:

(1) Success will not be invalidated or destroyed by failure.

(2) A successful inventor will not be crucified by a merely careless word or phrase.

(3) Hindsight of the wiseacre will not prevail over the evidence of history and achievement.

(4) Comparison of inventions is to be made by how they perform and what they do and not through words and phrases.

(5) Hard cases will not make bad law.

(6) One part of a contract and one part of a patent, which is a contract, may be construed in the light of other parts thereof and hence a patent claim may be construed in the light of the specification.

Even if one regarded the past administration of the patent law as "sinful," these more important rules ought to be preserved since use will be found for them in a future and less critical age.

Adherence to these rules is sufficient to affirm the Court of Appeals no matter where one plants the standard of invention.

No Prior Art Piston Could Operate at the Essential Minute Clearance. The Long piston was tested in the laboratory at .002" and failed; it "set up" and "seized" in the cylinder (R. pp. 666 and 1438); the clearance had to be more than doubled to .005" (R. pp. 458, 1438, 1587). At such

clearance it added collapse and breakage (R. pp. 939 and 380) to the many evils of pistons which gave the aluminum piston the "black eye" (R. pp. 461, 469, 939; 108 Fed. (2) 114).

Ricardo failed at a clearance between .0035" and "maybe nearly twice that" (R. pp. 1082 and 1181); it never succeeded at any clearance (R. pp. 185 and 186). Petitioners invite the human eye to fool a man into thinking Ricardo looks like Jardine in an effort to overcome the evidence of their operative differences; one must have the ability to understand beyond what the eye sees to appreciate why one was thus a failure and the other was a success. The patent law was, and should be, administered on what the brain understands and not on what the eye sees (*Machine Co. v. Murphy*, 97 U. S. 120, 125).

Franquist was not used,—at least on this record; it would have required a clearance much greater than .002" —at least as much as a trunk type piston (.008") (R. p. 546).

Schmiedeknecht, Hartog and Pomeroy were never used; nobody ever claimed they could operate at .002" clearance; the evidence showing that better pistons, like Long, could not, is conclusive that they could not.

Hartog is so far afield it was supposed to operate at .005" *larger* than the bore of the cylinder (R. p. 1800); of course, it could not. No piston could.

Schmiedeknecht, being a trunk type piston, would require .008" (R. p. 546).

Therefore, at the very threshold of this case, and without going further into it, it is manifest that to invalidate Jardine is to destroy his success on the failures of others.

No Prior Art Device Supports and Divides Its Parts to Permit Deformation of Certain Parts Without Interfering With the Essential Functions of the Parts. Jardine's mode of operation is briefed in the Jardine patent as follows (R. p. 1295, lines 21 to 28):

"I have found that these difficulties can be overcome by constructing a piston with its skirt or guide portion supported and slotted or divided in a manner to permit deformation and deflection of parts thereof *without interfering with the performance of the essential functions of the respective parts.*"

Throughout petitioners' brief and, indeed, throughout most of the consideration of the machines and devices involved in patent cases, presentation and consideration are localized to particular parts or particular functions. That, of course, is the easiest and laziest way to do it. However, problems are much more involved often, as here, involving not only the introduction of new operations and the performance of new functions, but at the same time the preservation of old performances and old functions. In other words, it would have served no purpose to have invented a piston which would have preserved the necessary clearance of .002" unless the original properties of the piston were preserved. Among these properties were ruggedness and durability, essentials which were necessarily affected, if not destroyed, by the slitting of the piston and the weakening of the webs so that they would be flexible enough to bend before the piston stuck. To look at a piston and say it is split, and therefore solves the problem, is the grossest of errors, for the piston had to be split in such a way as to retain durability and ruggedness, and yet the lazy mind will readily jump to the conclusion that the problem involved nothing more than splitting a piston to make it yieldable. Only the diligent mind can see that the splitting had to be done in such a way that the other essential functions, like durability and ruggedness, were preserved. **Hence Jardine has not only split or divided his parts, but he supported them in such a way as to realize the necessary yielding or bending and preserve all the other functions of the piston, including ruggedness and durability. In other words, he split and relieved the piston as and where it would provide the bending without**

breaking and relieving it where and how it would not destroy or impair the ruggedness and the durability.

Long, on the other hand, split his piston skirt in six different places. This destroyed the ruggedness and the durability of the piston, so he had to make the webs so rugged that they would not yield before the piston stuck when it was tried at the required .002″ clearance. Hence we find in his specification the description of a stiff web and find his piston used at double the required clearance.

Franquist recognized that preservation of ruggedness and durability were essentials and, in an effort to preserve these, failed to make his piston flexible enough; he didn't know how to do the latter and preserve the former.

Hartog threw ruggedness and durability to the winds, and made his piston very flexible, so much so that he thought he could maintain a spring contact between the piston and the cylinder without seizure. It is manifest that Franquist was never used because he was not flexible enough and Hartog was never used because he was not rugged and durable enough.

The same situation existed with respect to Ricardo and Pomeroy. Ricardo preserved ruggedness and durability at the sacrifice of flexibility, and Pomeroy did the reverse. Neither was ever adopted because the one was too stiff and the other was too flimsy.

Schmiedeknecht was too stiff, as was the trunk type of piston.

From this it is apparent that the problem was not solved by merely splitting this piston or that piston, or by merely building up pistons with splits in them. The problem was not solved by merely providing a flexible web in any piston, or by building up a piston with flexible webs; it is only solved by supporting such webs and other parts together and splitting and relieving in the proper places some of the parts so as to realize the yielding which would take place before the piston stuck, without interfering with such essential functions as ruggedness and durability.

These are the things which Jardine did which no prior art device did, and one who seeks the truth about the situation here is only deceived by localizing the consideration to some one feature like the web and its flexibility and skating over the balance, as petitioners do in their brief.

The specification of the Jardine patent is both meticulous and ample in this description, and the record fully supports him with evidence by those who were familiar with the operation of the Jardine patent and its solution of the aluminum piston problem.

It is no answer to this to quote what has been said about Gulick upon the theory that Gulick employed flexible webs because the parties here are compelled by the former decision of this Court to consider the Gulick patent as having rigid webs, until after Jardine's filing date as the Court of Appeals said it was compelled to do, as we assume the Court will consider itself compelled to do to avoid the inconsistency of holding webs rigid in one case and flexible in another.

No Prior Art Device Discloses Flexible Web or Web Flexibility: Jardine First Disclosed These Features.* Since it has been determined as a part of the law of this case that the flexible web or web flexibility is an essential feature and element of the combination, and since none of the prior art discloses a flexible web or web flexibility, none of it is applicable for anticipation, limitation, or negativing of novelty of the Jardine patent which does disclose a flexible web. By a long line of authority in this Court the rules regarding sufficiency of disclosure of a patent in suit apply equally to the prior art (*Cawood Patent*, 94 U. S. 695, 704; *Seymour v. Osborne*, 11 Wall. 516; *Downton v. Yeager*, 108 U. S. 466; *Eames v. Andrews*, 122 U. S. 40, 66). The rule is so old and well established that it is found as textbook law

---

* Again excluding Gulick, under compulsion of this Court's decision.

in the earliest textbooks on patent law. For example, Robinson states it with much authority to support it. From among these we quote the following (p. 453):

> **"That the publication must describe the invention as fully as does the patent to which it is offered as a bar,** see *New Process v. Koch*, 21 Fed. 580; *Downton v. Yeager Milling*, 108 U. S. 466 and *Hills v. Evans*, 6 L. T. n. s. 90."

Some of the prior art discloses no webs at all and of those that show and speak upon the subject, Long provides for rigid webs only.

Pomeroy did not provide flexible webs; he provided webs which yielded by foreshortening and lengthening along their horizontal axes in order to maintain the skirt sections parallel. His webs could not flex because they were tied together at their ends.

Hartog's skirt section was continued to the boss and wound up and out; it is doubtful if this could be called flexing, and it is immaterial if it could, because Hartog did not undertake to provide a piston to solve the aluminum piston problem. His piston could not maintain a clearance—all it could do was to eliminate the clearance. Under such an arrangement an aluminum piston would seize almost instantly in the cylinder.

Recognizing that nothing in the prior art discloses flexible webs or web flexibility, petitioners ask the Court to read this feature into certain prior art patents on the strength of testimony given at the trial (see bottom of page 11 and top of page 12 of petitioners' brief, for example). This Court, however, rules in its first opinion in this litigation that evidence of experts given at the trial could not supply lack of description of the flexibility of the webs in patent specifications (305 U. S. 47). So that unless this Court chooses to modify the long established rule that sufficiency of disclosure for a patent in suit and for the prior art are the same, set forth in the authorities we have cited *supra*, the insufficiency of the disclosure of the prior art

cannot be overcome by *ex post facto* evidence. To change this long established rule would create ludicrous situations. For example, in this case the Court would have to say that the webs of Gulick and Maynard were not flexible when their disclosures were read as patents in suit, but were flexible when read as prior art—a proposition untenable in law and ridiculous in common sense.

To Invalidate or Negative a Success on a Failure is abortive of the intent of the patent law and mournful in any branch of human endeavor.

Every prior art device relied upon by our adversaries was a prior effort and failure to solve the aluminum piston problem; every one of them failed to meet the desiderata; every one was a failure where Jardine was a success.*

The problem which was presented to Jardine for solution and the requirements which he had to meet are well stated by the Court of Appeals at 92 Fed. (2) 331 and 332.

It is important to remember that he was required to produce a piston in which there was to be, and to be roughly no more than, one-thousandth of an inch clearance between the piston and the cylinder, as illustrated in Fig. B on the page opposite hereto. The piston was to be of aluminum and the cylinder of iron, the two metals expanding and contracting at different rates, and yet the piston must maintain no more than this thousandth of an inch clearance on each side. If less, the piston would seize in the cylinder and, if more, it would slap and pass oil upward into the cylinder and gases downward into the crank case. In addition the piston had to be rugged and durable, to last for many thousands of miles, through rough handling and severe usage.

---

*On this record Gulick presented no more than a stiff webbed piston since his web piston was never made by him and his only disclosure was that of the Gulick patent which, as this Court held, could be considered to be a disclosure only of a rigid webbed piston.

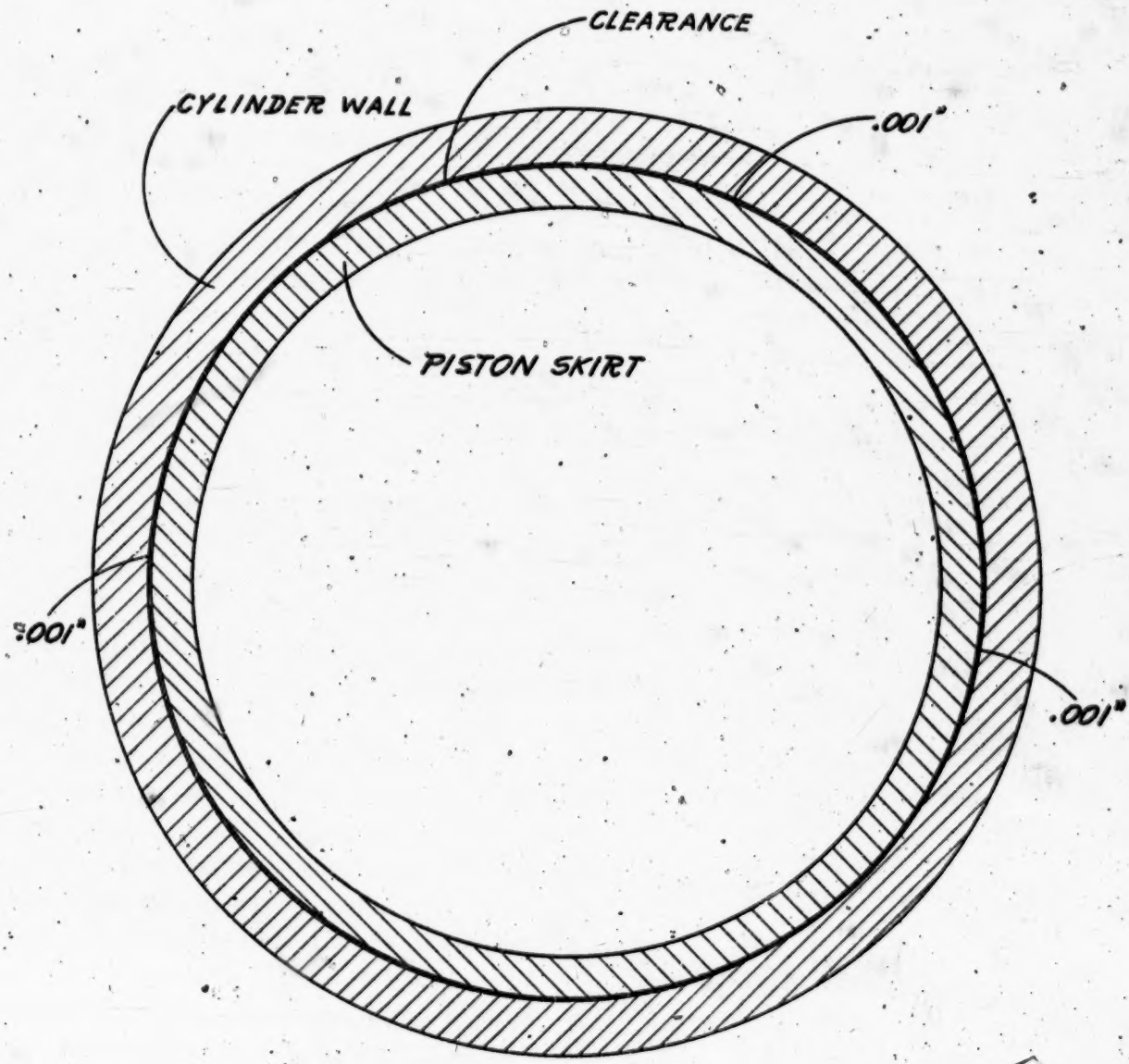


FIG. B.

BLANK PAGE

There is not a scintilla of evidence anywhere in this Record supporting a contention that any of the prior art devices could operate at this narrow clearance. For that reason alone all of them failed to solve the aluminum piston problem. It does not matter that some of them may have had flexible webs, though none did. It does not matter that some of them are split. It does not matter that the patents on some of them were owned by the plaintiff and licenses were granted under them. It does not matter how much some of them may have looked to the human eye like the Jardine piston. None of them was capable of operating at the required one-thousandths inch clearance. The burden was on the defendant to prove beyond a reasonable doubt that each of these prior art devices was capable of operating at the required small clearance (*Coffin v. Ogden*, 18 Wall. 120; *Mumm vs. Decker*, 301 U. S. 168). In most cases the defendants sought to skate over this proposition and avoid their burden by not offering any proof as to the clearance. The plaintiff, nevertheless, adduced proof showing that in all cases where any of these prior art devices were used, or their use was contemplated, the clearance was much greater than the one-thousandths inch which was a *sine quo non* of the solution of the problem.

"Smartness" of Petitioners' Brief (the old-fashioned term for this was "half-truths"): Petitioners' brief is replete with these "smart" statements which, if not corrected, would mislead, though we assume that they were not designed to mislead. Some of these are as follows:

(a) Jardine described flexible webs; Long did not: At page 5 it is said that the Long patent did not describe "flexible webs." The whole truth is that it described no other webs than those that are rigid in use. At the same page it is said that the Jardine claims "do not mention flexible webs." The whole truth is that the Jardine claims recite webs, and the only webs described by the specification are

"flexible webs." Since the only webs which the patentee could claim under the decision of this Court in this litigation, now the law of this litigation, is the webs he described in his specification, the webs in the Jardine claims must be considered as being flexible webs and no other webs, or this Court will be the first to depart from its former ruling.

(b) Court of Appeals on Long: On the same page it is said that the respondent's expert conceded that the Long commercial pistons had laterally flexible webs which the Court of Appeals held ineffective because the flexible capacity of these webs was not then known or understood. While such holding is supported in the rules of this Court (*Gayler v. Wilder,* 51 U. S. 497, for example), the Court of Appeals also held that Long was ineffective because the claimed concession of flexibility by the respondent's expert was not a concession that the webs were flexible in use or that their flexibility would cooperate with the other elements. This conclusion is justified by the description in the Long patent under which the webs must be rigid in use, an observation which establishes the insufficiency of the concession under the rule made by this Court in its former decision holding that flexibility in a piston web was an antithetical property. All of these conclusions of the Court of Appeals are further justified by the evidence adduced through petitioners' own witnesses that the Long piston seized at a clearance of .002", and could be used only at more than double that clearance (R. pp. 458, 461, 465, 469, 360, 656, 666, 1438, 1440, 1441, 1443, 1458 and 1587). The reason, of course, is that the Long webs did not flex in time to prevent the seizing, so that the large clearance had to be provided because the webs were rigid in use (R. pp. 359, 380, 672, 675, 676, 939, 1009, 1010 and 1011). In other words, their rigidity was so great that the pressure which would cause the seizing was less than the pressure which would cause the webs to flex. This is the whole truth of the situation.

(c) Public adoption and commercial use of Jardine: At page 6 of the brief it is said that Jardine was "without substantial commercial recognition." The whole truth is that more than One Hundred Million (100,000,000) pistons embodying the Jardine invention were successfully used (R. pp. 462, 471 and 955), though no pistons which were Chinese copies of the things shown in the drawings of the Jardine patent were used. It is seldom that a Chinese copy of the device shown in the patent is used. Generally it is that particular construction somewhat modified. There never was a single telephone made in duplication of Dr. Bell's first telephone; yet every one of the millions of telephones made and used since embodied his invention, and so forth without end. In the case of Jardine the modification was simple, consisting of the addition of the belt at the bottom of the piston, as illustrated in the pistons entitled "Maynard" and Exhibit 1 at page 15 of petitioners' brief. As the Court of Appeals said in its second decision, Jardine's combination appears in the commercial pistons of respondent's licenses like Exhibit 1 (108 Fed. (2) 114).

(d) Flexible webs not read into the claims: At the bottom of page 4 it is said that the Court of Appeals read "flexing webs" into the Jardine claims. This is not correct. The Jardine claims recite the webs and the specification describes them as flexible. Since, as this Court held in its former opinion in this case, the patentee could claim only the kind of web he disclosed in his specification, the Court of Appeals construed the webs recited in the claims in the light of the specification as flexible. This is not only justified, but imperative under this Court's former decision, since the only webs described in the specification of Jardine are flexible webs and the only webs that could be claimed by Jardine were flexible webs.

(e) Hartog: The assertion of what the Court of Appeals found with respect to the Hartog patent at the bottom of page 5 and top of page 6 of petitioners' brief is not only "smart," but unjust to the Court of Appeals in its smartness. The full finding of the Court of Appeals regarding Hartog is found at 108 Fed. (2) 114. There should be added to the things which petitioners mention, the failure of Hartog to disclose the Jardine mode of operation, the description of a different mode of operation from that employed by Jardine, the absence of any proof to establish similarity or identity with Jardine (it being the defendants' burden to supply such proof), and the apparent inoperativenss of Hartog. It is only half the truth, therefore, to say that the Court of Appeals held Hartog ineffective, because Hartog's thought "was not of the bending or flexing straight ribs."

(f) Court of Appeals found Jardine's invention in his combination: At the top of page 9 of petitioners' brief it is said that the Court of Appeals found the distinguishing feature of the Jardine patent to be the flexible webs. This is not correct, and is not supported by the portion of the opinion of the Court of Appeals referred to. The distinguishing feature of the Jardine invention and patent found by the Court of Appeals at that page was—

> "*a combination* with balanced skirt flexibility due to cooperation of longitudinal and vertical slotting with flexing webs supporting retracted bosses and connected to a skirt thereby made responsive to physical compression and thermal expansion so as to permit of minute clearance between piston and cylinder."

(g) Jardine always claimed to have invented a piston combination including flexible webs: At the top of page 8 of the petitioners' brief it is stated that at no time during the prosecution of the Jardine application was it urged that Jardine was the inventor of the piston having flexible webs. This is incorrect. On the contrary, at all times during all of the proceedings with respect to the Jardine pat-

ent it was urged through the specification of Jardine that he was the inventor of a piston having flexible webs, though the term "flexible" was not always used. Sometimes the word "bending" was used in connection with the webs, though, of course, that meant the same thing.

(h) Ricardo did not have Jardine's combination; it was a failure: About the middle of the same page it is said that the thing that was stressed at the trial regarding Ricardo was that it did not disclose flexible webs. This is another half-truth, because it was urged mainly that Ricardo did not have the Jardine combination, did not operate like Jardine, and did not get the Jardine results. It was also urged and shown that efforts had been made to employ Ricardo to solve the aluminum piston problem, that such efforts failed, and that many modifications were made of it, such as that shown in the Pomeroy patent, trying to make it succeed and that it always failed (R. pp. 185-187).

(i) Status of Maynard changed by this Court: At page 25 and again at page 26 of petitioners' brief, the Court of Appeals is quoted as saying that Maynard made no inventive step over the prior art. The truth of it is that the Court of Appeals did hold in the first decision that Maynard did make an inventive step, but after this Court held that the Maynard patent did not disclose the flexible web or web flexibility, the Court of Appeals, saying it was compelled to so view Maynard on the remand, concluded in the light thereof that this Court was not impressed with the Maynard patent as "making inventive steps over prior art." The apparent purpose of this half-truth was to couple what the Court of Appeals said about Jardine and Maynard in its former decision to give the impression that the Court of Appeals did not think well of Jardine,—a conclusion manifestly contrary to the findings of the Court in its second opinion. The comments the Court of Appeals made in comparing Jardine and Maynard

together in its first opinion were predicated upon the proposition that the Maynard patent disclosed a flexible web or web flexibility.

(j) Ricardo use just enough to prove its insufficiency: At page 11 of petitioners' brief it is stated that the Ricardo piston "was used to quite an extent in Europe," citing record page 218. A reference to this page shows that the only thing on this subject is the hearsay statement of respondent's expert to the extent that they were used in Europe "to a small extent." The record shows that the Ricardo piston was unsuccessful when attempts were made to use it as an aluminum piston with anything like the small clearance that was required (R. pp. 185, 187).

(k) Court of Appeals held Long did not solve the problem and lacked identity: At pages 48 and 49 of petitioners' brief, petitioners say of the Court of Appeals:

> "The basis of the rejection of these Long pistons as statutory bars to the Jardine patent was simply that the webs of these Long pistons were not 'known to have that (flexing) quality' or that this 'was then understood' prior to Jardine's earliest proved date."

The whole truth is that in addition to this reason the Court of Appeals, for a second reason, held that the Long pistons were not a statutory bar to the Jardine patent, and that second reason was that Long did not have flexible webs in use. Thus the Court of Appeals said (S. P. B. p. 8; 108 Fed. (2) 114):

> "The Long patent did not disclose flexible webs."
>
> * * * * *
>
> "Moreover, the Long patents recite that the separated portions of the skirt *are rigidly held* against bending to the forcing thrust of the piston. A Long piston was introduced to the industry by advertisement in The Motor World, December, 1921. It was installed in the Franklin automobile, and use at a clearance of .005 was set forth in a service bulletin. The evils following clearance so great are sufficiently

recited in our former opinion, and the announced clearance negatives the thought either of web flexibility or of its understanding by the art."

A third reason found by the Court of Appeals for finding that Long did not invalidate or limit Jardine is based upon the finding that Long contributed little to the solution of the problem of producing an aluminum piston with a .002" clearance. This third reason is stated in the following language (S. P. B. p. 8; 108 Fed. (2) 114):

"it follows that Long contributed little to the solution of a problem whereby successful operation of an aluminum piston in an iron cylinder at clearances of .002 or less was achieved."

A fourth reason was that since Long worked for a considerable period in the piston art and made a number of pistons, there was never a disclosure of web flexibility in any of Long's numerous documents which described many, if not all, of the pistons which he designed over a substantial period of time (S. P. B. p. 8; 108 Fed. (2) 114).

Further discussion on the Long patents and pistons will be found at pages 54 to 86, *post*. (Point II).

(l) At page 24 of petitioners' brief it is said that the Maynard piston based on the Jardine piston could not be used in the Franklin car, citing Record page 548. There is no such statement at that page (see the evidence at R. pp. 462, 471 and 955 on the wide use of the Maynard type of the Jardine piston), but, on the contrary, Mr. Stellman, defendants' expert, there testified:

"Q. To your knowledge were other automobile companies than the Franklin during that period working on this problem of reducing the clearance with the aluminum piston? A. From the period 1915 on?

"Q. To 1920, we will say? A. Yes, sir, they were.

"Q. And how general was that problem being worked on at that time? A. Quite general, I should say. I know of one other company that used them more or less in that period.

"Q. Those who were working on it would include the leading engineers of the leading automobile companies of the country, wouldn't they? A. Yes."

Defendants' expert declined to say that Maynard was inoperative except under "severe conditions" which is true of any piston. If it was intended to refer to Record page 528, the statement is still incorrect because all that defendants' expert said there was that he would not consider Exhibit 1 suitable for the Franklin engine. If this is true it is unimportant because when a Jardine type of piston was designed for such engines as Franklin, they were not only successful, but displaced the Long piston (R. p. 1011).

(m) On the same page (P. B. 24) it is said that

"The first commercial split skirt piston put on the market by any of respondents' licensees did not appear until 1923, R. 69."

Mr. Stellman, defendants' expert, speaking of the pistons furnished by respondents' licensees, said:

"I know that that piston shown in the drawing (of the Maynard patent), and commonly known as a split skirt piston in the industry, was used in quantities since around 1921."

This date is undoubtedly before the December, 1921 date of the Long Exhibit F piston (R. p. 2271) and the 1923 date is not.

(n) On page 27 (P. B.) it is said that "There is no evidence of any piston like Exhibit 1 having gone into use without that Keystone relief." The Record shows, largely on the testimony of defendants' own expert, Mr. Stellman, that such pistons without "that Keystone relief" were used commonly, widely and successfully (R. pp. 462, 471 and 955). The piston illustrated in the Maynard patent, No. 1,655,968, to which Mr. Stellman referred (R. p. 462) was without "that Keystone relief" as shown at page 26 of petitioners' brief. Moreover, what petitioners have christened "that Keystone relief" is no more than shaving off a corner

of the walls of the relief. Since it has no effect on operations and results, except perhaps in degree, it is entirely immaterial to the case. The only importance of challenging the statement is to show how unreliable are the statements in petitioners' brief.

These instances will illustrate the character of petitioners' assertions. We might continue almost indefinitely to point out other like instances for there is statement after statement in the brief that is either erroneous, a half-truth, or pregnant with misleading innuendo or inference.

ARGUMENT ON PETITIONERS' SPECIFICATION OF ERRORS.

We will reply to the Petitioners' arguments following their points and procedure.

POINT I.

(a) The Court of Appeals did not treat "flexing webs" as essential elements of the Jardine patent; they treated webs as essential elements whether they were flexible or the equivalent thereof.

(b) Webs which are flexible, as stated in the specification, are recited in the claims; the Court of Appeals did not read "flexing webs" in the claims, but construed the webs in the claims as flexible in the light of the specification.

(c) Webs that would flex were not surrendered during the prosecution of the application, nor were "flexing webs" so surrendered, if that makes any difference. What were surrendered during the prosecution of the application were combinations of elements different from the combinations which were preserved.

(d) The Court of Appeals did not refuse to follow the decisions of this Court, but was meticulous in its effort to follow the most recent decisions of this Court, and particularly this Court's first decision in this litigation, wherein this Court overruled the Court of Appeals.

(a) The rule that one part of a document may be construed in the light of another part is not peculiar to patents or the patent law. It runs throughout all the law; it runs to the construction of contracts and a patent is a contract. There has never been any question, in the patent law or in its application, of the right of the Court to construe a claim in the light of the specification in accordance with this general rule of contracts. In order to avoid falling into the confusion into which the petitioners have fallen, it is necessary to consider the rules on these questions as follows:

First, that an element cannot be read into a claim;

Second, that a claim cannot be construed to include a property or feature not described in the specification, and

Third, that an element in a claim may be construed in the light of the specification.

First—If the Jardine claims did not recite the element "webs," the webs could not be read into the claims from the specification. That is the rule in *McCarty v. Railroad Company, White v. Dunbar,* and other cases relied upon by the petitioners. Petitioners recognize this rule and consequently try to draw a red herring across the trail by using the term "flexible webs" as if the rule required the claim to recite the property and details of the webs. In other words, that every claim would be no broader than the specific embodiment of the invention shown in the specification—contrary to the rule in *U. S. v. Societe,* 224 U. S. 309, 328.

Second—This is the rule made by this Court in its first decision in this cause. It was carefully followed by the Court of Appeals.

Third—As far as construction of claims and specifications is concerned, *the difference between the issue now before the Court on the Jardine patent and that previously before this Court on the Gulick and Maynard patents, is that Jardine in his specification described his webs as*

flexible and Gulick and Maynard did not. When effort was made to construe the Gulick and Maynard claims as if reciting webs as flexible, there was nothing in the specification to support such a construction. On the instant consideration, however, the Jardine specification, in referring to the webs as flexible, furnishes a basis for a construction of the term "webs" in the Jardine claims as flexible, if that is necessary.

As we have said, it has always been the rule that one portion of a contract can be construed in the light of other portions. Since a patent is a contract, it is subject to the general rule of construction of contracts (*Walker on Patents,* Deller Edition, pp. 1204 and 1205, citing cases in this Court). The entire instrument, including the drawings and specification of a patent should be used in construing it (*Walker on Patents,* Deller Ed., p. 1205, citing cases from this Court). The claims in the patent should be so construed as to uphold and not destroy the right of the inventor, and this is particularly true where the patent covers a meritorious invention, as the Jardine patent has been held to do (*Walker on Patents,* Deller Ed., pp. 1205-1207).

A question of construction of patent and claims is a question of law for the Court (*Walker on Patents,* Deller Ed., pp. 1209-1210, citing cases from this Court). That the language of the claims may be construed in the light of the specification is elementary patent law.

This Court has had occasion to apply this rule of construction by aid of the specification in a long line of cases dating from as far back as 1850 and running down to some of the most recent decisions of this Court.

In *Carnegie v. Cambria,* 185 U. S. 403 a claim was presented which recited metal without saying whether it was "cupola" metal or "blast furnace" metal. It was urged that the claim was broad enough to cover both and invalid since the use of cupola metal in such a combination was old. This Court consulted the specification and found

the specification was devoted to "blast furnace" metal and construed the term "metal" in the claim as meaning blast furnace metal in the light of the specification, saying (185 U. S. 432):

> "*The claim of a patent must always be explained by and read in connection with the specification,* and as this claim clearly includes metal taken from blast furnaces, the question whether it includes every molten metal is as much eliminated from our consideration in this case as if it were sought to show that the word 'metal' might include other metals than iron."

In *Hogg v. Emerson,* 52 U. S. 587, this Court said (p. 606):

> "The court did right, too, in holding to the propriety of looking *to the whole specification,* and also to the drawings, for explanation of any thing obscure."

In *Seymour v. Osborne,* 78 U. S. 516, this Court said (p. 547):

> "Where the claim immediately follows the description of the invention it may be construed in connection with the explanations contained in the specifications, and where it contains words referring back to the specifications, it cannot properly be construed in any other way."

In *American Fruit v. Brogdex,* 283 U. S. 1, this Court said (p. 6):

> "*The claim of a patent must always be explained by and read in connection with the specification.*"

In *Smith v. Snow,* 294 U. S. 1, 14, this Court said:

> "Examination of the claim, in the light both of scientific fact and of the particular form in which the petitioner reduced the claim to practice *as described in the specifications,* makes it plain that the claim does not call for a particular order or arrangement of the eggs in staged incubation in the incubator, or that the propelled current should reach them in any particular order, or that it should be guided, controlled or directed by any particular means, or in any particular manner

other than that it should be of sufficient velocity to produce the results prescribed by the claim."

Therefore, when the petitioners ask the Court to change this rule, they ask the Court to do something more than change a long established rule of patent law. They ask the Court to change a rule of contract which was adopted long before there was any patent law and has been followed ever since, not only in the Courts in this country, but in the Courts in England before there was a United States (17 *C. J.*, Sec. 707, *et seq.*).

Since claim construction and patent construction, like the construction of any other document, is a question of law for the Court, the construction of the Jardine claims given by the Master is not entitled to any weight, as compared with the construction given the claims by the experienced and able Court of Appeals.

Even the cases relied upon by petitioners reflect the rule, for while in each *White v. Dunbar* and *McCarty v. Railroad Company* it is held that an element cannot be read into a claim, this Court in each case went to the trouble of explaining that such a ruling did not mean that the context might not be resorted to for the purpose of better understanding the meaning of the claim, and to show the connection in which the device is used and that it is operative while the opinions we have cited, *supra,* show that these rules are applicable to claim constructions. All of these statements appear in the quotations from *White v. Dunbar* and *McCarty v. Railroad Company* appearing at page 31 of petitioners' brief. Likewise, in *Permutit v. Graver,* this Court, in refusing to construe the claims as reciting a "free" zeolite bed, was careful to point out that the specification failed to describe a "free" bed. Likewise in its former decision in this litigation (305 U. S. 47) this Court was careful to explain that no basis could be found in the specification for the term "flexible" and, therefore, the webs recited in the claims could not be construed to be flexible. In other words, in both *Permutit v. Graver* and in

Schriber v. Cleveland Trust, this Court is careful not to breach the rule of patent law and of contract law that one part of a contract like a patent claim may be construed in the light of the specification.

Therefore, when the Court of Appeals went to the specification to construe the webs recited in the Jardine claims and found that the specification described them as flexible, the Court was right under the law of this Court and of contract law in general in so construing the webs in the light of the specification.

The language of the Court of Appeals on this subject is as follows (S. P. B. pp. 6 and 7):

> "While the specimen claims of Jardine 1, 8 and 11, though reciting the web as an element do not incorporate therein the property of flexibility, *yet in the light of the description they must be so interpreted, for it is clear that the Supreme Court in reversing our decision departs not at all from the rule that claims must be read in the light of the specification,* since it is pointed out with particularity in respect to Gulick that his specifications point to no inadequacy in the structure or function of webs of the prior art which would be remedied by the webs specified, and to no function to be performed by them other than as a means of connecting and holding head and skirt so as to maintain the air gaps between them and to support the wrist pin bearings. Jardine repels this criticism of the Gulick application. It is also pointed out that Gulick failed to explain the principle of his machine so as to distinguish it from the prior art. Jardine points to prior art failure. 'I have found,' he says, 'that these difficulties can be overcome by constructing a piston with its skirt or guide portion supported and slotted or divided in a manner to permit deformation and deflection of parts thereof without interfering with the performance of the essential functions of the respective parts.' "

It not only appears from this language that the Court of Appeals was careful in applying the established rule.

both in patents and contracts, but was exercising care not to disagree with the former opinion of this Court in this cause.

Petitioners must have been well aware of the nature of their effort to ask this Court to overrule the established practice both in patents and contracts, for effort is sought to bolster up the contentions by resorting to a case in the Court of Appeals in the Sixth Circuit in an effort to make out an exception. In the case relied upon, *Scaife v. Falls City,* 209 Fed. 210 (P. B. 34), the patentee asked the Court to read *structure into the claim* (not to construe structure already in the claim, as here). The claim recited a filter, and the patentee asked the Court to read structure, i. e., "a filter divided into several units" into the claim, which would have been a violation of the rule in *McCarty v. Railroad Company.* This the Court refused to do, and properly so, but that has nothing to do with the instant case. The Court of Appeals did not in the case at bar read any structure into the claims. They only interpreted structure already in the claims as having a certain property which the specification described it as having and which the merest tyro in the business would know that it did have whether it was in the specification or not (R. pp. 201, 568, 125). In the cited *(Scaife)* case the real reason why the Court would not read the claim as the patentee requested was that there was another claim which recited the structure which the patentee proposed be read into the first claim under consideration, and the Court would not read it into the first claim under consideration because it would have made it coextensive with another claim. Thus the Court said on the subject (209 Fed. 213):

> "Resorting to all these means of interpretation, including a comparison of the several claims, we are satisfied that claim 10 will not bear this narrow construction; and not the least of the considerations compelling this result is the fact that *this peculiar form of filter is the dominant thought of another claim.*"

In the instant case the Jardine claims readily bear the construction and when given the construction are not made coextensive with any other claim in the patent.

(b) The omission of the word "flexible" from the Jardine claims may have been deliberate and intentional without making the rule of construction inapplicable. As a matter of practice, parties making contracts, of which patents are one form, do not, and are not, expected to repeat in each section of the contract everything that is said in every other section. When two people enter into a contract for the sale of a black horse or a race horse they do not have to repeat the "black" or the "race" every time the horse is mentioned elsewhere in the contract. To do so would make contracts cumbersome and repetitious. For that reason the rule of construing one part of the contract in the light of the other part was established in the early days of contract law and has been followed ever since. The parties not only deliberately and intentionally, but with all of these things aforethought, do not repeat the "black" or the "race" before the word "horse" every time it appears in the contract. They know that they are not required to do so. Hence they "deliberately and intentionally" omit to do so. It is also true in the case of patents. Jardine's solicitor knew that he had described the webs as flexible in the specification. He knew the contract law. He knew a patent was a contract. He knew the rule that one part of a contract or patent can be construed in the light of another part. He knew the elemental rule that a term in a patent claim could, and as some of the decisions say "must," be construed in the light of the specification and for that reason he found it unnecessary to include the word "flexible" before webs in the claims. So whether he left the word "flexible" out of the claim deliberately and intentionally is immaterial. Petitioners' counsel know all these rules and that is the reason they keep talking about "flexible webs," not being in the claims, thereby hoping apparently to lead

one to believe that the webs are not recited in the claims. They very well know the rule that if the webs are in the claims and the specification describes the webs as flexible, the webs may be so interpreted.

(c) At the bottom of page 34 of petitioners' brief it is said "thereafter claims including flexible webs were added by amendment" to the Jardine application. *No such claims were added.* Claims reciting parts that were "yielding" were inserted though such parts were never stated to be webs and there is nothing in this record to show what parts were meant, much less that the webs were meant. Likewise, there is nothing in this record to show what was meant by "yielding"; the record does not show that flexing was meant by yielding. There are many kinds of yielding besides flexing, such as skewing, compressing, distorting or displacing, for example.

Petitioners' discussion of the proceedings in the Jardine file wrapper is also corrupted with the same heresy. Instead of talking about "webs" as elements, the talk is about "flexible webs," as if the webs and the flexible webs of the Jardine patent were two separate and distinct things and as if there were no rule that the webs of the claims could be construed as flexible in the light of the specification.

The salient and ancient rule that inventions are to be found in the entire combination and not in the single elements of the claims by themselves (*Leeds & Catlin v. Victor,* 213 U. S. 325, 332) and the ancient rule that a combination claim cannot be invalidated merely because some of its elements are old (*Expanded Metal v. Bradford,* 214 U. S. 366, 381) are both ignored or offered here for sacrifice. The combinations in the claims which were presented in the Jardine file wrapper proceedings and cancelled were different combinations from those which appear in the claims in the Jardine patent. It was the combinations in the cancelled claims that were yielded and not the differ-

ent combinations in the claims in the Jardine patent. Therefore, it does not matter what elements were included in the cancelled claims as long as the combinations were different. The estoppel only goes against asserting for the claims in the patent the scope accorded the cancelled claims. The estoppel only goes to an effort to recapture what was yielded in the Patent Office as a condition of the grant. None of the claims of the Jardine patent, whether the webs be construed as flexible or not, were yielded in the Patent Office. The claims yielded were much broader.

It would not matter if Hartog and Pomeroy and Long had disclosed flexible webs if they did not disclose the combinations of the Jardine claims, which they did not. In other words, as this Court said in the *Expanded Metal* case, the combinations in the Jardine claims could not be invalidated merely because one of the elements of those claims was found in Hartog, Pomeroy or Long.

Such fundamental rules are not only ignored but flouted throughout the petitioners' brief. The brief is written as if the Court would wave these rules aside. Instead of discussing the combinations of the claims and comparing structures through the combinations, effort is made to compare them merely through one feature or one element of the combinations claimed.

It might be said that if such long established rules are to be reversed or ignored, and the whole question is to be decided upon whether or not there is a piston in the prior art having a flexible web, then we must direct our attention to the question of whether or not there was a flexible web in the prior art. If, furthermore, the petitioners are to have the privilege of *ex post facto* interpretations of the flexibility or rigidity of prior art webs which was not accorded the patentees in the first consideration of this litigation by this Court, then we have still another situation to meet which almost resolves itself into a proposition that the law for the petitioners is not the law for the respondent.

When the established rule of contract, patent and claim construction, and the established rules that it is the combinations in the claims that are to be considered in making comparisons and not their individual elements, are followed, then there is nothing to the petitioners' case, as is evidenced by the fact that they never attempt to meet this rule, but always talk about the flexible webs, as if that was all there was to the Jardine invention, petitioners assert that the prior art has flexible webs when there is no evidence that any did have flexible webs; some evidence is cited with the claim that it taught flexibility years after Jardine's patent issued. As we show this evidence can under no interpretation have such flexibility as to permit the maintenance of the .002" clearance and to preserve the ruggedness and durability essential in the piston.

(d) Upon the basis of this heresy it is claimed that the Court of Appeals considered that flexing webs was a distinguishing feature of Jardine and that it is necessary to read the flexing webs into the claims to avoid the prior art. It ought to be sufficient answer to this to say that the Court of Appeals did not read "flexing webs" into the claims. The webs were already in the claims. However, since counsel argue from emasculated excerpts from the opinion of the Court of Appeals, we add to what we have already said and what we have already quoted on the subject, that the Court of Appeals looked upon the Jardine invention as the combination of elements recited in the claims and held them valid because such combinations were not in the prior art.

At page 36 of their brief counsel quote, on this subject, two and one-half lines from the first opinion of the Court of Appeals. The full quotation on this subject is as follows (92 Fed. (2) 336):

> "He cut away all the skirt portions at the webs, extending the latter to nearly the length of the skirt parts or slippers. Horizontal slots partially insulated the slippers from the head and these were split verti-

cally to render them yieldable to contact with the cylinder wall. The head was integrally connected to the skirt only in the region above the bosses. His thought was that since heat expansion tends to increase the diameter of the piston in a direction parallel with the wrist pin bosses, when the skirt around the bosses is removed, the central part of the web is free to move while its ends are restrained and resisted by the skirt faces in contact with the cylinder wall."

The combinations in the Jardine claims are not found in the prior art, whether the webs be considered as flexible or not.

The Court of Appeals did not say that the webs in the Jardine claims must be construed as flexible to make the claims valid. What they decided was that it was perfectly proper to construe the webs as flexible in the light of the specification and when so construed, the claims were valid. They did not, however, say that the claims would be invalid if they had not resorted to the specification to note that it was proper to construe the webs as flexible. It is not essential that the webs be flexible or that they be construed as flexible to avoid the prior art since the combinations in the claims are not found in the prior art, whether the webs be construed as flexible or not. Petitioners do not show that such a combination is in the prior art. The Patent Office did not find it in the prior art even when it erroneously believed that flexible webs were found in that art. Jardine, as his specification shows, depended upon the flexibility of the skirt and upon the "deformation and deflection of the parts," as he says in his specification (see p. 1, line 25; p. 2, line 97). All of these factors, including the skirt flexibility, web flexibility, deformation, deflection, and displacement of parts, contribute to the solution of the problem. There is no evidence that all have to be present at the same time, though in the preferred form of his invention all are present. There is no prior art device which relies upon all except web flexibility. Therefore, even though

the Jardine claims were not construed in the light of the specification, the claims would be novel and patentable.

There is no dispute that if they are construed in the light of the specification they would be novel.

The Court of Appeals did not read "flexing webs" into Jardine's claims contrary to this Court's decision, as petitioners say at pages 38 to 41 of their brief. Here again we have the reference to flexible webs instead of webs construed to be flexible in the light of the specification. In its former decision this Court held that webs and claims could not be construed as flexible where that quality had been denied in the specification. It did not hold that webs in claims could not be construed as flexible where that quality had been stated in the specification. Everything in this Court's former decision was convincing that this Court adhered to the ancient rules of contract and patent law that claims could be construed in the light of the specification, as is evidenced by the fact that this Court reached the conclusion that the term "flexible" was improperly included in the Gulick specification before concluding that, therebecause, the Gulick claims were invalid. In other words, in order to lay a foundation for holding the Gulick claims invalid, this Court found it necessary to expunge the description of the flexibility of the Gulick webs from the specification on the ground that it was new matter. *Contra*, if flexibility had been in the specification of Gulick originally, and not inserted as new matter, there would have been no basis for deciding the claims to be invalid, on that ground.

This is also true of the Maynard patent, since before holding the Maynard patent invalid, as not disclosing webs which were flexible, this Court examined the specification of Maynard to see if there was reference to the flexibility of the webs and, not finding it there, the claims were held invalid because the term "webs" in the Maynard claims could not be construed as being flexible. In the instant case we depart in two ways; first, the Jardine specification does

describe the webs as flexible and, second, webs that are flexible are not essential to the Jardine combination. Therefore, it is error to say, as petitioners do at the top of page 38 of their brief that "what the Court of Appeals actually did was to practically substitute the Jardine patent for the Gulick patent." On the contrary, what the Court of Appeals did was to find "flexible" relating to webs properly included in the Jardine patent, whereas it had been improperly included in the Gulick patent, as this Court found. Insofar as this litigation is concerned these are all the differences that matter.

Not only did the Court of Appeals follow with meticulous care the law made by this Court in its former review of these cases, but the Court of Appeals exercised special care to conform to the high standard of invention set by this Court in its recent decisions. On this subject the Court of Appeals said (108 Fed. (2) 112):

> "for though we are as sensitive as is the Court of Appeals of the Second Circuit (*Buono v. Yankee Maid Dress Corp.*, 77 F. 2d 274, 276), to 'the high standard demanded for invention by the decisions of the Supreme Court in recent years,' attested by many of our more recent decisions, yet we also share Judge Learned Hand's understanding that the Supreme Court has not departed from the principle that recourse must be had in doubtful cases to the history of the art for the interpretation of claims and the existence of invention." (S. P. B. p. 5.) (See *Smith vs. Snow, supra; Paramount vs. Tri-Ergon, supra.*)

Hartog and Jardine: The Jardine claims were allowed and patented over Hartog because (1) the combinations of the Jardine claims are not found in the Hartog structure, (2) Jardine's mode of operation is different from Hartog's, (3) Hartog did not get, and did not claim to get, the Jardine results, and (4) Hartog failed where Jardine succeeded in solving the piston problem.

A structural claim is not required or expected to recite mode of operation, results or success over failure. Nevertheless, these factors are evidence upon the question of the importance of the differences in structure and the patentability of the invention. After all, patent cases are, or at least were before petitioners' brief was written, tried on substance and not on words (*Machine Co. v. Murphy*, 97 U. S. 120, 125 and a host of other cases citing this leading decision).

In discussing the patentability of Jardine over Hartog, the Court of Appeals discussed the evidence on the differences in operations of the two, the differences in the achievements, the success of Jardine where Hartog was a failure, as well as the differences in structure. (108 Fed. 2d 113 and 114). In so doing the Court made, *inter alia*, the statement quoted from the Court's opinion at the bottom of page 39 and again in the middle of page 40 of petitioners' brief. With characteristic error the petitioners say that no claim was ever made by Jardine that he was the inventor of a piston characterized by the matter in this excerpt, and with characteristic sophistry argues that the Court of Appeals "apparently" read the subject matter of this excerpt into the Jardine claims.

Jardine asserts in his patent that the features contained in the excerpt are characteristic of the preferred forms of his invention. Thus, at page 2, lines 19 to 34 of his patent (R. p. 1296) there occurs the following:

> "This gives in effect *a cantilever structure* weakest at its support, namely, along the dotted lines 13 in Figs. 1 and 4. Thus the reaction force of the cylinder wall on the outer faces of the guide segments as the piston expands tends to cause *bending of the webs* 6 along said lines 13. *Due to the bending of the web* sections 6 and the forcing together of each pair of segments, the guide part of the piston may undergo a considerable *thermal expansion* without a corresponding increase in the outer diameter thereof and

thus *a small initial clearance* can be used without danger of scoring or seizure of the piston."

The italicized parts are sufficient to explain the pertinency of the excerpt.

The Court of Appeals read none of the subject matter of the excerpt into the structure claims. The Court of Appeals, however, did construe the claims in the light of the specification and referred to the context of the specification for a better understanding of the meaning of the claims. It construed the claims, as it was proper that it should do, to operate and to yield the results claimed for the Jardine structure such, for example, as the bending property of the webs, the operation on the cantilever principle, the yield to thermal expansion, etc., all of which are features of operation and results and have no place in a structure claim which, as the name indicates, is intended to recite structure.

The excerpt from *McCarty v. Railroad Company* at the top of page 40 of petitioners' brief is not applicable because no "element is included in the claims"; bending is not an element; the cantilever principle is not an element; thermal expansion is not an element. All of these are properties or principles. The language of the decisions which are applicable is such as found in the excerpt from *White v. Dunbar* and the other case relied upon by the petitioners in the premises (This brief, pp. 38 to 41). This language from *White vs. Dunbar* found on page 31 of petitioners' brief is as follows:

"The context may, undoubtedly, be resorted to, and often is resorted to, for the purpose of better understanding the meaning of the claims."

Likewise, in *Altoona v. Tri-Ergon,* discussed in the footnote at the bottom of page 40 of petitioners' brief, it was—

"The addition of a new element"

that was forbidden. This Court did not forbid the construing of the elements of the claim in the light of the specification or resorting to the context for a better understanding of the meaning of the claim. Justice Stone, who wrote the opinion in *Altoona v. Tri-Ergon,* also wrote the opinion in *Smith v. Snow, supra.*

It is, therefore, apparent that it is mere sophistry to charge the Court of Appeals with reading elements into the claims when the Court of Appeals did no more than refer to the context to construe the claims. Moreover, there was no need of reading anything into the claims since they already distinguished from each of the prior art structures by structural elements and, when we come to substance, since that must be considered, in the adjudication of patent cases, Jardine succeeds where these others failed. The first proposition is evidenced by petitioners' effort to select features of structure from different prior art devices to build up the Jardine combinations and the latter by the repeated statement of half-truths regarding the prior art constructions, such as the claim that Long was a success when the record shows that he was a failure at the .002" clearance which was an indispensable concomitant of success.

Hartog did not undertake to claim to solve the aluminum piston problem. He makes no claim that his piston was to be of a material different from the cylinder. Therefore his piston was manifestly to be of the same material as the cylinder, as was the custom in his day when the "black eye" given the aluminum piston had discouraged such people as Hartog; his piston was to be fitted in the cylinder not at a clearance, but at a pressure. He provided yielding skirts in order to be able to compress his piston so as to insert it in a cylinder that was smaller than the piston, as one does when one "puts the big pot in the little one." He did not expect the skirt to, and there is no proof or claim that it could, flex sufficient to

compensate for the differences in expansion between an aluminum piston and an iron cylinder. While his skirt sections, curving from the wrist pin to the end of the skirt part, would wind and unwind, thus yielding under the pressure of the hand or a clamp to insert them in the cylinder, they would not flex or bend in the sense in which the Jardine webs do to contribute to the solution of the aluminum piston problem. *Hartog's piston worked just the contrary of Jardine's in that Hartog provided spring sections to make a firm contact between the piston skirt and the cylinder and Jardine did everything that could be done to prevent this firm contact.* Hartog made a continuous pressure against the cylinder; Jardine prevented this to maintain the proper clearance. What was Hartog's "meat" was Jardine's "poison." In the Hartog piston where the materials of the piston and cylinder were the same, a yielding part which made a firm contact would be "meat" whereas if an aluminum piston should make such a firm contact with the iron cylinder, it would be "poison."

Hartog not only lacks ruggedness and durability, but it is so flimsy it would yield and wobble under the pull and push of the crank rod (R. p. 259).

Hartog antedates Jardine on this record by less than thirty days; since little was said about Hartog by Petitioners (R. pp. 215 and 259), until after the status of Gulick was changed by this Court, Jardine did not carry his dates back of Hartog. It was not necessary to do since Petitioners made no effort to, prove identity or substantial identity beyond a reasonable doubt. Now it is sought to supply by innuendo what should have been supplied by evidence convincing beyond a reasonable doubt. The only evidence on the question is that at record pages 215 and 259 which proves beyond a reasonable doubt that Hartog was unsuccessful and lacked identity with Jardine. Hartog

is a typical case where ruggedness, durability and positiveness in action were sacrificed to get skirt parts that would yield to coil up and out.

The webs of Exhibit 1 are flexible and the difference between the flexibility of the webs of Exhibit 1 and of the Jardine patent is merely a matter of degree. The testimony of defendant's own expert on this subject is sufficient. Mr. Stellman, defendant's expert, testified on the subject on re-direct examination as follows (R. p. 581):

> "Q. Mr. Richey asked you on cross examination whether the flexibility of Exhibit 1 and the Jardine patent structure was one of degree, and I believe you answered yes. What did you have in mind when you made that answer, that the flexibility was the same? A. No, it was comparable in degree.
>
> "Q. And how in degree? A. One might be more flexible than another in degree."
>
> (See pp. 566 and 530 of the record.)

With this our expert agreed (R. pp. 953-955).

The quotation relied upon from plaintiff's expert is inappropriate and must yield in any event to what Mr. Stellman and Dr. Jeffries said. It is inappropriate because it deals with a hypothetical structure, whereas the testimony of Mr. Stellman and Dr. Jeffries deals with the actual structures.

There is no evidence in the record to support the conclusion of the Master quoted at the top of page 42 of petitioners' brief. All the testimony, even that of the defendant's expert, is contrary, as is clear from the above quotation from Mr. Stellman's testimony at page 581 and also from his testimony at pages 566 and 530, all to the effect that the Exhibit 1 webs are flexible, and the only difference between the Exhibit 1 webs and the Jardine webs in that respect is a matter of degree of flexibility.

POINT II.

THE LONG PISTONS AND THE COURT OF APPEALS' VIEWS WITH RESPECT THERETO.

There were several defenses against the Long pistons, some of which only were discussed by the Court of Appeals; those discussed were sufficient to dispose of Long and, as the Court of Appeals explained, it could not discuss all the issues in an opinion which must have limits. Therefore, it is not to be assumed that the Court of Appeals agreed with petitioners on the issues not discussed as petitioners contend (P. B. 17 and 53).

(1) The first defense against Long is that the record shows that none of his numerous pistons solved the piston problem of reducing the clearance to .002" and preserving the ruggedness and durability of the piston, notwithstanding the efforts to "half truth" the auditors into believing that Long's use at .005" was a solution of the piston problem. On this first proposition the Court of Appeals found (S. P. B. p. 6; 92 Fed. (2) 334):

> "Long's recognition of an existing problem in any art, and the advantages to accrue to an industry from its solution, *coupled with repeated failures to find solution,* has ever been considered as highly persuasive of invention when success is finally attained."

and (S. P. B. p. 8; 108 Fed. (2) 114):

> "It is said that pistons could not in an air cooled motor as was the Franklin, be machined to the minute clearance possible in water cooled motors. If true, it follows that Long contributed little to the solution of a problem whereby successful operation of an aluminum piston in an iron cylinder at clearance of .002 or less was achieved. It should, moreover, be noted that Long was a worker in the piston art for a considerable period. Three of his patents are in the record. It is conceded that No. 1,872,777 was his best effort, yet the structures urged to anticipate Jardine were devices prior to it, and while they may have had some commercial history,

his latest patent still failed to describe or claim web flexibility."

There is no finding by the Master or the District Court below that Long ever succeeded at .002" clearance. There is no finding by either Master or District Judge that Long cured the slapping, a *sine quo non* of the solution; he did not (R. p. 469). There is no evidence to support any such findings. Unless, therefore, Jardine's success is to be wrecked on Long's failure, there was no need of the Court of Appeals rejecting Long on a second or third ground.

Nor did Long solve the aluminum piston problem in the air-cooled motor for his piston was never satisfactory in the air-cooled motor which the Franklin Company employed. In the face of a crying demand for an aluminum piston which would solve the aluminum piston problem (R. p. 458) the Franklin Company was the only manufacturer of internal combustion engines or automobiles who adopted and used the Long piston. In the Franklin car the behavior was unsatisfactory. The pistons slapped, collapsed, and otherwise misbehaved (R. pp. 458, 469, 939, 401 and 461). It was never satisfactory in production (R. pp. 455, 359, 1587, 1438). It was never a solution of the piston problem (R. p. 968). The Franklin Company was constantly trying to supplant it (R. p. 1793), as other workers in the art who knew of its behavior in the Franklin car were trying to displace it (R. pp. 363, 364, 1010 and 1011). Its use was a mere drop in the bucket compared with the pistons used (R. p. 399). The pistons would not stand up (R. p. 672). It was supplanted at an early date even in the Franklin car (R. p. 1011).

The claim that because Long was a failure in the Franklin car it would have been a success in other automobiles because the problem was less difficult in other automobiles than in the Franklin is, of course, a mere conjecture not borne out by the facts. Petitioners furnished, and could furnish, no evidence that the Long piston did solve the

piston problem in the water-cooled engine, though the burden was upon them to prove such beyond a reasonable doubt. History shows that it did not solve this problem because it was not adopted in these other cars. Its adoption, as we say, was limited to the Franklin car, though there was a crying demand for this kind of piston which was supplied as soon as the pistons involving the Jardine invention came upon the market.

Several places in petitioners' brief (pp. 25 and 55) it is charged that the respondents manhandled Long and drove him out of the piston business. This is not true. The record shows that his piston was driven out by the pistons involving the Jardine invention (R. pp. 672, 141, 176 and 187), because the latter was a solution of the aluminum piston problem and nothing that Long had produced was such a solution. The procedure of the respondent in the premises amounted to no more than the institution of a suit against Long for infringement of patents which, under the statutes and law of Congress, the respondent had the right to bring. Long was satisfied because he settled the suit; it is petitioners who try to make trouble of it.

(2) The second ground upon which the Court of Appeals rejected Long was lack of identity. Long's many efforts at the piston problem and his many patents prior to Jardine culminated in the piston illustrated and described in his patent No. 1,872,777 (R. pp. 1736-1738). On the subject of lack of identity the Court of Appeals said (S. P. B. p. 8; 108 Fed. (2) 114):

> "Moreover, the Long patents recite that the separated portions of the skirt are rigidly held against bending to the forcing thrust of the piston." and
>
> * * * * *
>
> "The Long patent did not disclose flexible webs."

Both statements are verified by the description of the Long piston on the second page of Long patent No. 1,872,772 (R. p. 1738).

Thus Long disclosed a piston skirt weakened by six vertical and two horizontal slots dividing the skirt into six sections which were to be held rigidly against bending by the webs and also to be so held against falling apart in use which they sometimes did do (R. pp. 380, 1438, 1440, 1441).

Neither Master nor District Judge made any finding to the contrary; no evidence in the record would support a contrary finding. The Court of Appeals, having disposed of Long on two grounds, neither in discord with either Master or District Judge, might be excused from discussing other grounds.

(3) The third ground upon which the Court of Appeals rejected Long was that since the antithetical property of "flexible" could not be accredited to Gulick's webs, since there was no basis in the Gulick specification therefor, the same rule applied to Long. Petitioners then contended that our expert had admitted that Long's webs were flexible (of which we will say more hereinafter) and that Long's description of webs that were rigid should then be construed as flexible. This the Court of Appeals rejected, saying (S. P. B. p. 8; 108 Fed. (2) 114):

> "Since the argument that the webs of Gulick were laterally flexible to the understanding of those skilled in the art was rejected, so must we reject inference that prior to Jardine the art understood the webs of Long to be flexible in the absence of clearly convincing evidence that they were known to have that quality."

No judicial finding below the Court of Appeals and no evidence in the record challenges this conclusion. It is warranted by a long line of cases (see cases cited at page 69 of this brief).

The claim that our expert testified that the Long webs were flexible related not to any piston shown in any Long patent, but to the piston illustrated for the first time in

The Motor World, December, 1921 (R. p. 2271), more than a year after Jardine's filing date.

(4) Being ousted from all other Long pistons, petitioners have to resort to this 1921 Long piston (also called Ex. F).

The Court of Appeals disposed of that piston in the following language (S. P. B. p. 8; 108 Fed. (2) 114):

> "A Long piston was introduced to the industry by advertisement in The Motor World, December, 1921. It was installed in the Franklin automobile, and use at a clearance of .005 was set forth in a series bulletin." (p. 1590.) "The evils following clearance so great are sufficiently recited in our former opinion," (92 Fed. (2) 331 and 332) "and the announced clearance negatives the thought either of web flexibility or of its understanding by the art."

No finding below the Court of Appeals and no evidence in the record challenges these findings.

(5) Since lack of identity and failure are each sufficient to dispose of the 1921 Long piston, it was not necessary for the Court of Appeals to pursue the matter and dispose of it on other grounds, yet because the Court did not, petitioners repeatedly assert that "the Court of Appeals did not question the fact" that this piston antedated Jardine. The Court did not; it was silent on this subject unless the comment by the Court of Appeals that

> "A Long piston was introduced to the industry by advertisement in The Motor World, December, 1921" (S. P. B. p. 8; 108 Fed. (2) 114),

may be taken to mean that December, 1921 was the earliest date for the piston there illustrated, a very fair inference for the use of the word "introduced." Certainly a more reliable inference than that the Court thought otherwise because the Court said no more on the subject.

(J) In view of the lack of identity of this latest Long piston and its failure at .002" clearance, its earliest date

is unimportant. Yet counsel urge it and are as erroneous here as elsewhere (see P. B. pp. 53 and 54).

There is no documentary evidence that this Long 1921 (Ex. F) piston was in existence prior to Jardine's filing date; the first documentary evidence is the December, 1921 Motor World (R. p. 2271) mentioned by the Court of Appeals (S. P. B. p. 8; 108 Fed. (2) 114). Petitioners claim no other documentary evidence. All the oral evidence claimed to relate to this piston might just as well have related to one of the other numerous Long pistons which were issued in an almost continuous stream over the years by Long as effort followed failure and failure followed effort in a rapid series (R. pp. 398, 429, 444, 1532, 1537, 1728-1732, 1668). Indeed, the witnesses, though well coached (perhaps more than is proper, R. pp. 358, 369, 400, 408), often warned the Court that they could not themselves trust their memories among so many Long pistons after so many years (R. pp. 379, 444, 447).

Red herring dragging is manifested by such claims as the following (P. B. p. 54):

> "Chadwick produced the pattern and core box used which produced it, and that this is true is self-evident from the fact that the casting, Exhibit NN, produced by the employment of the pattern and core box is a duplicate of Exhibit F, except that Exhibit F is machined."

The "nigger in the wood pile" here is the sole difference between Exhibit F (the 1921 Long piston) and the Long piston of patent No. 1,872,772 is in the "machined" part, so that the pattern and core box could just as well have been used for the latter as the former (R. pp. 426, 427, 429, 444, 447, Exhibit NN, see P. B. p. 54).

Next it is said (P. B. p. 54):

> "The Long patent, 1,872,772, with its filing date of March 7, 1919, is a duplicate of this piston, except that it does not mention the relief in the regions of the bosses, nor that the webs are flexible."

If the webs of the Long patent piston (1,872,772) were not flexible, those of the 1921 piston (Exhibit F) would not be.

There then follows in the petitioners' brief a discussion of some activity by a Mr. Venner who was trying to improve upon some one of the Long pistons. There is no documentary evidence of what Long piston was before him or of just when he began his efforts to improve it. Whatever it was, he recognized its shortcomings, as he said, and was trying to eliminate them (R. p. 362). Counsel refer to pages 352 and 353. We find no references on these pages to a Long piston like that illustrated in the Motor World of December, 1921 (Ex. F). Apparently the discussion is injected rather for the purpose of touching up the "hard case" which counsel seem to think they have because of the license to Aluminum Company of America, since it is contended that Aluminum Company of America made castings for Venner, but there is no evidence that the castings had anything to do with the Ex. F Long 1921 pistons. It is said that Venner was familiar with the Long piston, but there is no documentary evidence of which of the Long pistons it is claimed that Venner was familiar with. It is said that Aluminum Company of America made castings for the Long pistons in 1920, but there is no evidence that they made any castings from which pistons like Exhibit F were made prior to Jardine's filing date in 1920, or afterwards, for that matter. It is said that witnesses for the respondents testified that this Exhibit F piston was made by Aluminum Company of America in 1920. No reference to the record is cited—probably because the only thing the Aluminum Company of America did was to make castings and whatever evidence, if any, there is upon the subject to which counsel refers, it does not show that the Aluminum Company made any castings used to make Exhibit F pistons prior to Jardine's filing date on March 11, 1920.

Other claims of supporting evidence for an alleged date of the Exhibit F prior to 1921 are presented in petitioners' brief beginning at page 17 where this Ex. F piston is illustrated. The reference to Dr. Jeffries' testimony at page 987 of the record shows that he gave no date regarding the time that Exhibit F was used. There is no evidence that the castings which he said the Aluminum Company of America made for the Long pistons (R. p. 940) were for pistons like Exhibit F or were used for that purpose. As a matter of fact, they were castings which might have been machined into one of several of the Long pistons.

The question and answer quoted from Mr. Stellman's testimony at the bottom of page 18 of petitioners' brief is not to the effect that Exhibit F was in existence in 1916, but that at that time Long showed him a piston, according to Stellman's recollection, which had a rib in it like that shown in Exhibit F "in a general way." Other pistons had such a rib in them at that time. At record page 986 Dr. Jeffries did not testify that the Long piston was the first split piston in commercial use. He said that he did not know that he knew of any which preceded it. He was not referring to Exhibit F. In fact, there is no evidence to which Long piston he referred, but he did say it was no solution of the automotive piston problem (R. p. 986). Venner's testimony regarding the Long pistons was purely oral and he was so uncertain about the particular piston that he had in mind at any date that he referred to them as a "type." For example, at page 349 of the record, he said:

> "F is the same *type* of piston that Mr. Long showed me in 1916."

Of course, F is the same *type* as each and any of the Long pistons, depending upon the witness' conclusion. Venner may have seen any one of the Long pistons in 1916, and in 1934 testified that it was of the same *type* as some other

Long piston. This is the kind of evidence the petitioner asks the Court to accept as proving the Long date beyond a reasonable doubt. The reference to the testimony of Chadwick at page 378 of the record shows that the questions seeking to induce him to give a date to Exhibit F were grossly leading, that the answers were based upon opinions, and with the warning that

> "*I won't say* I know of any of these pistons, like Exhibit F, being made at the time that I came with Mr. Long in December, 1918. *It is pretty hard to go back at that time to be exact as to the exact design.*"

Thus does the witness warn everybody of the unreliability of his memory among the various Long piston design over fifteen or twenty years.

The next record reference, pages 338-341, were undoubtedly intended to be 438-441. If so, they refer to the testimony of Royalty who also warned everybody of the unreliability of his memory among Long's numerous types after fifteen or twenty years (R. p. 444). Even in the discussion of the pistons at the pages referred to by our adversaries, Mr. Royalty protects himself against a mistake by referring to the pistons as "the same *type* of piston," which might mean any Long piston since they were all of the same *type,* depending upon the opinion of the witness.

The next reference is to testimony of Stellman regarding some tests that the Franklin Company made on a Long piston in March, 1919 and to a report of that test at page 1629 of the record. This was the earliest report that he could find (R. p. 467). The report says nothing about which Long piston was tested and the best that petitioners' expert, who knew about the tests, could say to help counsel was that the piston employed was "*similar* to Exhibit F." Of course, the piston shown in the Long patent 1,872,772 is "*similar* to Exhibit F," so that the piston tested in March, 1919 by the Franklin Company might have been any of the Long pistons since all are *similar* to Exhibit F.

It must be remembered that Mr. Stellman was not only serving as petitioners' expert, but had been hired to look up evidence for petitioners (R. pp. 462 and 465), and that, therefore, he was to be expected to aid the defendant as far as possible. His claim that this March 1919 piston was no more than of the *type* of Exhibit F therefore damns the plaintiffs' proposition with faint praise. Unless Mr. Stellman had something to hold back, he would have said it was identical with Exhibit F. There is no need for us to answer here the claim that it was Exhibit F that was used for replacements in April, 1920 and for production in November, 1920, because those dates are subsequent to Jardine's filing date and would, therefore, be immaterial, if true. There is, however, no proof that the Long piston so used in either instance was Exhibit F, except of the nature we have discussed. The piston there used is referred to by Mr. Stellman as "those Long *type* pistons" (R. p. 456) which "I should say" were "*similar* to type F" (R. pp. 456-7). Here again the injection of the witness' opinions and conclusions where he, as the expert and evidence hunter for the defendant should have been positive, imply, if they do not prove, the contrary of petitioners' contention.

Proceeding on pages 20 to 23 of the petitioners' brief, confusion upon confusion is caused by reference to Long pistons which were not Exhibit F with the inference that they were, and to expressions of opinions by the witnesses as to types, similarities, etc. as if they were positive statements, and all subject to the further criticism that they were purely oral statements made from fifteen to twenty years after the time to which they referred and all relating to the confusing numbers of different designs of Long. The testimony of Mr. Murphy at page 654 of the record is referred to. Mr. Murphy was plainly talking about the piston of the Long patent 1,872,772, and not about Exhibit F. He says that in the 1919 test of this piston it "froze in the cylinder and was pretty badly damaged" and, fur-

ther, that they continued the tests upon those pistons (still referring to the piston of the Long patent 1,872,772) through 1919 and to what extent in 1920, he did not know. This could tend to clear up the character of piston that was used in the 1919 tests referred to by Stellman and a report of which is found at page 1629 of the record and also explain the reason why defendant's expert would go no further than to use the word "similar" to each, when he was guessing at what piston was used in this test. Further reference is made to Mr. Murphy's testimony at page 61 of the record where he continued to talk about the piston of the Long patent. When confronted with Exhibit F he said "I can't say that the piston I just spoke of differed at all from Exhibit F." He thought it was of the same type as Exhibit F, but that it differed somewhat, though of general shape. This would be a description of the piston in the Long patent.

Mr. Castor's testimony is of the same character. He uses the word "type" of piston where he should, if petitioners can carry their burden, refer to the exact thing. He says he first saw a piston like Exhibit F in 1920. He did not say he saw it before March 11, 1920. He said he did not see the type in 1918. He was uncertain, saying that he might have seen the Exhibit F "type" in 1919, but he would say that he first saw it in 1920. This testimony is indefinite both as to date and as to piston because the piston shown in the Long patent 1,872,772 is of the type of Exhibit F and was in existence in 1919.

When counsel pressed the witness Burns for a commitment as to Exhibit F, the best the witness could do was to testify as follows (R. p. 687):

> "Q. Was it or was it not like Exhibit F, that type B? A. Well, it was a strut type piston."

Many of the Long pistons were strut type pistons, including the one shown in the Long patent 1,872,772. At page 685 of the record, when pressed on the same subject, he

said he would not say that it was that piston that was used in the 1919 tests or he would not say it wasn't. He said he would not say the relief was on there or was not on there.

As we have said, the patterns and core boxes mean nothing because these could have been used, and were used, to make castings for other types of Long pistons than Exhibit F. As counsel say, the castings were machined after they were made and the patterns and core box give no guide as to how they were machined. They might have been machined like any one of several of the Long pistons. It is not helpful to record when these patterns and core boxes were taken out and used because if we knew what kind of castings were made from them there would be no way of knowing how the castings were machined. The inventories of Long pistons are not helpful because they do not say what Long piston is referred to in these inventories. Nobody doubts that the Long piston, Exhibit F, shown in the December, 1921 Motor World was provided with a relief, but that does not establish the use of the combinations employing the relief prior to Jardine or make that combination identical with Jardine in either structure, mode of operation or results.

Elsewhere in this brief we have shown how counsel, in discussing the clearance employed on the Long pistons, has omitted to say that the use of the Long piston at .002" clearance was experimental and that at such clearance they failed, and that their use commercially was two and one-half times that clearance, which was not only no solution of the problem, but a conclusive concession of failure; indeed, no concession of failure could be more conclusive than that which resulted from tests made by so substantial a concern as the Franklin Company was at that time.

The claim that Stellman testified that the Long pistons went into service at from .002" to .003" clearance is incorrect, and the references to the record to support it

do not support it. On the contrary, Mr. Stellman testified that they gave these Long pistons the clearance of .004" to .005" (R. p. 458). This is not only supported by the service bulletin of the Franklin Company (R. p. 1590), but by the testimony of Mr. Castor of the Franklin Company (R. p. 672).

It is thus apparent that the careful study and conclusions of the Court of Appeals on this subject are challenged by discussions of evidence relating to other Long pistons than Exhibit F, as if that testimony related to Exhibit F. Statements are made in petitioners' brief that the witnesses were referring to Exhibit F when a reference to the record shows that they were referring to pistons which they said were no more than pistons of that type, or *similar* to Exhibit F, and often with the qualifications that they did not know whether it was or was not, and that their memories were not good over the years.

The record is full of collateral statements by witnesses which negative any contention that this Exhibit F Long piston was in use prior to Jardine's filing date. Anyone who has observed witnesses testifying knows that these side remarks, made often without knowledge of their bearing upon such questions as the dates of the Exhibit F Long piston, are a safer guide than oral guesses made in the interest of the parties who call the witness. Thus, at page 463, of the record, Mr. Stellman, defendants' expert, testified that the Long piston had not proved satisfactory in production prior to April 8, 1920. This was about a month after Jardine's filing date, so that if Exhibit F were a successful piston, as counsel contend, it could not have been in existence prior to Jardine's filing date for the obvious reason that at that time still no Long piston was successful.

The application for the Long patent 1,872,772 was filed March 7, 1919. This application does not show the piston Exhibit F as illustrated in the 1921 Motor World. If, as

is now contended, the tests of the Franklin Company in March, 1919 had employed Exhibit F, certainly Exhibit F would have been shown in the application from which the Long patent 1,872,772 issued. Contrary to petitioners' statement (P. B. p. 23) that there is "no specific statement of a relief in the Long patent 1,872,772," the relief 12 is shown and numbered in the patent and is described in lines 63 to 67 of the patent (R. p. 1737). That relief, however, is of a different kind from the relief of Exhibit F and the internal construction of the piston is different.

We think the following questions and answers brought out by cross examination of Mr. Stellman, defendants' expert, clears up not only what was meant by the Long "type" piston, but establishes conclusively that the piston which the Franklin Company used commercially was not the piston, Exhibit F, shown in the 1921 Motor World, but the piston of Long patent 1,872,772 (R. p. 548):

> "XQ. *Did the Long type mean the one shown in this Long patent 1,872,772?* A. *Yes.*
>
> "XQ. *That is, it was the type of Long piston that was used commercially by Franklin at that time?* A. *Yes.*"

This evidence also establishes the fallacy of petitioners' effort to convert the indefinite language of the witnesses regarding "type," "similarities," etc. to mean Exhibit F, where the piston of the Long patent 1,872,772 was meant by the witnesses.

It thus clearly appears that where it was thought necessary to do so, to challenge the finding of the Court of Appeals, petitioners have not hesitated to resort frequently to the following:

(1) to make statements that are clearly contrary to the record and which have been so often discussed as to make mistake most improbable. Such a statement is the declaration that Long was used at .002" clearance when the record repeatedly shows that such use was merely

experimental and failure, and that the commercial use was at .004" or .005" clearance.

(2) to half-truths such as stating that the witnesses referred to Exhibit F when they testified no more than that they were referring to pistons of that type, or pistons similar thereto which may have been the piston of the Long patent 1,872,772 or some other Long piston and most probably were, in view of Mr. Stellman's testimony quoted *supra* (R. p. 548).

(3) reference to the use of patterns, castings, etc., as if they were peculiar to Exhibit F, whereas they could have been, and were, used for other Long pistons.

(4) asserting the testimony of witnesses regarding these Long type of pistons fifteen or twenty years afterwards as if the witnesses were positive about their statements, when the witnesses themselves warned that their memories were unreliable upon these subjects after so many years and all this even after they had been coached to the point of telling them not to talk to the respondent before going on the witness stand.

Certainly a case must be a "hard case" to warrant making such bad law as would hold that a thing was proven beyond a reasonable doubt by such evidence under such circumstances. No matter how hard a case it may be thought that the association of the Aluminum Company of America in the premises or the ownership of the patent by the trustee-plaintiff makes out, such a case is certainly not hard enough to justify making such bad law.

The testimony regarding the use of the Long pistons was adduced by deposition. Although Mr. Stellman, the defendants' expert, appeared before the Master for the purpose of experting the case, his fact testimony regarding the Long pistons was taken by deposition. It results that all the evidence regarding the Long pistons and their alleged uses was adduced out of Court and the Master did

not see and hear the witnesses who gave the testimony. If it shall be held that his view differed from that of the Court of Appeals, it is well established that since the Master did not see and hear the witnesses, his conclusions in this Court are entitled to no more weight than that of the Court of Appeals. Indeed, in the particular circumstances of this litigation we think the analysis of the testimony by the Court of Appeals as conclusive thereon, is more reliable than that of the Master because of the superior experience of the Court of Appeals in such matters.

It is well established that the high credit to be given to the conclusion of a trial Court in the analysis of testimony is based entirely upon the seeing and hearing of the witnesses by the trial Court, and where the trial Court did not see and hear the witnesses, but sat, in fact, as a reviewing Court on the evidence, no more credit is to be given to the conclusion of the trial court than to the Court of Appeals. *Louisiana v. Mississippi,* 282 U. S. 458, 465; *Midland v. Bobbitt,* 70 Fed. (2) 416, 420 (C. C. A. 8); *The Marsodak,* 94 Fed. (2) 339, 341 (C. C. A. 4); *Grove v. Brewer,* 103 Fed. (2) 175, 179 (C. C. A. 1).

We think the analysis of the evidence establishes indubitably that Long did not have the (Ex. F) 1921 Motor World piston until after Jardine's filing date. However, it is not necessary for us to establish this fact. It is necessary for the petitioners to establish it "beyond a reasonable doubt." The authority on this subject is well established by decisions in this Court ancient, intermediate and current. Indeed, it may be fairly said to be established that such a proposition cannot be proved without supporting documentary evidence. Here, as we have said, there is no documentary evidence earlier than the 1921 Motor World. The latest pronouncement on this rule of law is probably sufficient. It appears in *Smith v. Hall,* 301 U. S. 216 where Mr. Justice Stone, speaking for this Court, said (p. 222):

> "*This oral testimony,* if taken at its face value, would show that the Smith method was used in the Brooklyn incubator with eggs in staged incubation. *But without corroboration, it is insufficient to establish prior use, Barbed Wire Patent,* 143 U. S. 275, 284; *Deering v. Winona Harvester Works,* 155 U. S. 286, 300; *Eibel Process Co. v. Minnesota & Ontario Paper Co.,* 261 U. S. 45, 60, and we turn to *the documentary evidence* that Hastings knew the method of the patent and used it in his Brooklyn structure."

Here the Court considered the oral testimony was not sufficient to establish the prior use without corroboration, so turned to the documentary evidence. In the instant cause there is no documentary evidence to turn to.

(7) Unless it be held that Long's Exhibit F, 1921 Motor World piston is prior to Jardine, what we say in sections (a) to (d) following is unimportant. If, however, the Court considers that the evidence shows that this Exhibit F is prior to Jardine, then we show:

(a) It will be remembered that the Long patent 1,872,712 discloses a piston with a rigid web and fails to disclose flexible webs (108 Fed. (2) 114). To this petitioners agree (P. B. pp. 5 and 54). Petitioners, however, assert often and loud that the slight change in Exhibit F over the patented piston made the webs of Exhibit F flexible. As the change was not in the webs or in the parts supported rigidly by the webs, the fallacy of this contention is apparent upon mere observation. However, since effort is made to assert the contrary, it becomes necessary to consider the proof relied upon to support the contention.

At the threshold, petitioners find nothing upon which to place reliance except what is admitted to be the unwinding of "a double negative" in the testimony of Dr. Jeffries (P. B. p. 49).

It is well established that the burden is upon the defendant to prove "beyond a reasonable doubt" that a prior art device operated like the patented device (*Coffin*

v. Ogden, 18 Wall. 120; 85 U. S. 120); it at once becomes apparent that a conclusion that petitioners arrive at by an effort on the part of their counsel to unwind a double negative in the testimony of a witness is perhaps less reliable than any proposition ever submitted to establish this point beyond a reasonable doubt. When counsel tangle the witness up in a double negative, the witness's meaning of his answer probably depends upon his attitude toward grammer and syntax. It is apparent that the question was so asked as to invoke the answer which resulted in a double negative so as to enable petitioners to give either meaning to the answer. If, in these circumstances, it becomes important to consider the matter further, we point out that the subsequent testimony of the witness shows that the answer which petitioners claim to arrive at from the unwinding of this double negative is erroneous, and immaterial, if correct, for the witness went on to testify (R. p. 1010) that "the Long pistons were not satisfactory," and that those who were in touch with them at the Franklin Company "would come back with repeated tales of how they weren't satisfied with their (the Long) pistons," statements depicting situations manifestly contrary to a conclusion that the Long webs flexed in use.

Since all of the Long pistons used by the Franklin Company, including Exhibit F, had to be used at clearances from .004" to .005" because they set up or seized at .002" (R. pp. 1438, 1439 and 1590) the slight change in Exhibit F over the patented Long piston did not result in making the webs flexible as it is apparent such a change would not do.

Since the Long patent 1,872,772 had described the web as lacking flexibility as is conceded (P. B. pp. 5 and 54) and as designed and functioning to hold its supporting skirt portions "rigidly" "against bending" nothing that Dr. Jeffries said should be construed to mean anything else (p. 1738). Certainly Dr. Jeffries could not change those facts and, if there were in fact any ambiguity in the dis-

entangled double negative, it should be construed as not changing the truth as Long had thus stated it.

Another trap for the auditor in the double negative and its unwinding is to be found in the fact that at the time the witness gave the answer to the question, which was pregnant with the double negative, the parties were talking about the flexibility of the piston under pressure excited by a specially designed clamp (Exhibit 3-I) and that the question and answer as to whether the Long piston was flexible or not have, as like as not, reference to its performance in this clamp and not to its performance in an engine cylinder. It would, of course, be immaterial if the webs of this Exhibit F were flexible under the clamp and, at the same time, not flexible enough to yield to the pressure exerted in the engine cylinder under the necessary clearance of .002" before seizing. In other words, the Court is asked to believe, when the double negative is unwound, that the witness testified that the webs of Exhibit F were flexible under the pressure of the clamp and, therefore, they were flexible enough to operate in an engine cylinder at .002" clearance when the experience with the Franklin Company found that this was not true and, as a result, had to use them from two to two and one-half times that clearance. Furthermore, the Court is asked to believe that this evidence establishes beyond a reasonable doubt that the operation of Exhibit F with regard to flexibility of web was the same as that of Jardine. We do not know how anybody can expect a Court to come to any such conclusion in view of what this Court said in *Smith v. Hall, supra.*

(b) Before this Court's decision in its former review of this cause (305 U. S. 47; S. P. B. p. 47), it was the law that neither a patentee nor a prior art person was required to know or explain the scientific principle upon which his invention worked. For example, with respect to the patentee, there is *Eames v. Andrews,* 122 U. S. 40, 56, and for the prior art person there is *de Forest v. G. E.,* 283 U. S.

664, 686, relied upon by the petitioners at page 45 and 46 of their brief. On the former review we urged that the flexing of the web was the scientific principle upon which the web operated and that under the rule in *Eames v. Andrews* neither Gulick nor Maynard was required to explain that principle. Such had been the view of the Court of Appeals below, the Court of Appeals of the District of Columbia and the Court of Customs and Patent Appeals. This Court, however, ruled against us.

We have already cited the authority of this Court to the effect that the rules regarding disclosures in patents in suit and prior art are the same (see authorities cited page 24, *supra*). Manifestly, as we have pointed out, they could not be different, as illustrated by the example in this very litigation under which the Gulick and Maynard patents would have to be construed one way as patents in suit and another way as prior art, an inconsistency intolerable under any administration of the patent, or any other branch of law. The ox which the petitioners succeeded in creating on the first review has come back to gore the petitioners, who, now, under the authority of *de Forest v. G. E., supra,* seek to excuse the failure of Long to describe the flexibility of his webs, if they were flexible. Indeed, petitioners go further in that they seek to have the Long webs, which are admittedly not flexible under the only description of them, held to be flexible. The excuse given for this is that it is not necessary that there be an explanation of the scientific principle of web flexing in the prior art. In other words, this Court is asked to take the position that the failure of Gulick and Maynard to explain the scientific principle of flexibility was insufficient to meet the requirements of the disclosure of a mechanism in the patent law, but notwithstanding the same omission by Long still it is sufficient for Long. Correlating this to Gulick or Maynard, this Court is asked to rule that the disclosures in Maynard and Jardine were insufficient as patents in suit to teach

those skilled in the art, but would be sufficient as prior art to teach those skilled in the art, the intolerable inconsistency in law or common sense to which we have referred. We are frank to say that we still think this Court was in error in its first decision, but since that is now the law of this case, we do not see how it can be applied inconsistently to aid the petitioners in both cases. Not even a "hard case" would justify such a practice.

It is no answer to this to say, as petitioners do, that the patent statutes do not say that the scientific explanation of a prior known or used or sold device must have been known to anybody because likewise the patent statutes do not say that the scientific explanation of a device covered by a patent in suit must have been known to anybody, and they are so interpreted by a long line of decisions of this and other Courts, including *Eames v. Andrews, supra.* If anything, the decisions are more strict in the case of the prior art than of the patent in suit because of the temptation to, and the large number of cases in which effort has been made to, read incorrect scientific principles into prior art devices through the *ex post facto* wisdom of those who are brought to bar as infringers of a patent. With a little bit of hindsight imagination, and a normal amount of vanity, anybody could make an invention after it has been made or could have found it in a prior art disclosure where he could not have found it before.

It follows that if web flexibility is a scientific principle in a patent in suit, such as Gulick and Maynard, it is a scientific principle in the Long piston, and that unless the concurring rules in *Eames v. Andrews* and *de Forest v. G. E.* are changed to destroy the present consistency between them, and to create another technicality upon which a meritorious inventor may be tripped up, flexibility can be no more read into the Long piston than into the Gulick and Maynard pistons by expert evidence to the effect that the webs are flexible, which evidence was adduced at the

trial. An outstanding difference is that both experts furnished the evidence supporting the web flexibility in the Gulick and Maynard pistons and there is no evidence to support any flexibility in the webs of the Long piston except the conclusion which undertakes to unwind the double negative, and if that be accepted, nothing is established except that the web is flexible, perhaps under the power of the clamp, as against the evidence that in actual use it was not sufficiently flexible to operate at the desired clearance.

Attempt is made to lay a foundation for the Court making this distinction and changing the consistency between the rules in *Eames v. Andrews* and *de Forest v. G. E.* by claiming that, although it was not known that the webs of the Long piston were flexible (perhaps under the clamp), it was always possible to reproduce the Long piston, Exhibit F, and flex it (under the clamp), and, therefore, a distinction should be made between a prior use device and a prior publication such as the Gulick and Maynard patents. This also is fallacious, for it is a good deal easier to produce a device from a drawing than from a specimen and, to common knowledge, drawings are almost universally used in making and reproducing devices in preference to a specimen itself. Moreover, in the instant case the evidence rebuts any such conclusion as petitioners suggest because the faults of the Long piston, including the necessity of using it at from two to two and one-half times the desired clearance were commonly known to such skilled engineers as those of the Franklin Company. Many were the complaints about it and many were the efforts to try to modify it to reduce this clearance, including those made by Mr. Long himself. During all of this trial and effort and failure, no one saw that the Long piston webs were flexible enough to achieve this desideratum, if they ever were, though the Long pistons were before them ready to be duplicated, as counsel contend they might have been.

(c) The Court of Appeals rightly relied upon the rules of law that prior accidental performance or prior

unrecognized performance could not be resurrected to anticipate or limit a later inventor. If Long ever produced any webs which were flexible at all, or flexible enough, neither he nor anybody else recognized either of these propositions. This is evidenced by the absence of all suggestion that the webs are flexible in any Long documents, including the 1921 Motor World, and by the description in the latest Long patent relied upon (1,872,772) of webs which are rigid, but by the stream of efforts to improve the Long pistons, including those made by Long himself without anyone making the webs flexible prior to Jardine, if at all.

There is still another rule of law in this connection and along this line which the Court of Appeals might have relied upon, and that is the rule that patent protection is not always to the first inventor, but to the one who benefits the public by teaching the public what the invention is and how to practice it (*Gayler v. Wilder*, 51 U. S. 477). It cannot be said that Long taught the public either web flexibility or the advantage of web flexibility if no one knew that Long had web flexibility prior to the trial of this case, which knowledge at the trial is the most that petitioners contend, even if the Court accepts their conclusion of the unwound double negative or if it is important that at that time it was recognized that the Long webs were flexible under the clamp.

Unless, therefore, we are prepared to apply one rule to the same set of facts in connection with Gulick and Maynard and another rule with respect to Long, the claim that Long had flexible webs must fall with the former decision of this Court in this litigation, and if we do apply different and inconsistent rules to Gulick and Maynard, on the one hand, and Long, on the other hand, all that would have been established would be that in 1934 it came to be known that the Long webs were flexible, perhaps, under the pressure of the clamp, which furnished no information as to their performance or behavior in the engine cylinder and did not change, in any way, the fact that that performance was

such that the piston could not do what the Jardine piston did from which it is inevitable to conclude *that Long was right in describing the piston as having webs which were rigid in the only description that was ever written of the piston.*

(8) Re the Unwinding of the Double Negative: Petitioners have made so much of the double negative occurring in the question and answer of Dr. Jeffries at pages 1009 and 1010 of the record as to warrant the conclusion that petitioners seek to fight these law suits on this double negative battlefield. To wage so important a contest and seek its answer upon such a narrow field would not only be quibbling, but would be ironical. After all, the Long web is only one element of the Long combination, as the Jardine web is only one element of the Jardine different combination, and even if the description in the Long patent and all of the other evidence on the subject were ignored and it were held that the answer to the enigma of the double negative was that Long's webs and Jardine's webs were alike, that would not make the combinations the same. The combinations would still be different, the modes of operation would still be different, and the results would still be different. Not only are patent cases not to be decided upon such meager and trivial questions as comparisons of single elements, but they do not ultimately rest upon comparisons of combinations but upon the more substantial ground of the performances of those combinations. There is not a word of evidence in this record to support a claim that the performance of Long's piston is the same as Jardine's piston whether Long's webs are flexible or not.

As reluctant as we are to descend to quibbling upon such a narrow field, we suppose it is incumbent upon us to say how we think the double negative ought to be unwound and what was meant by the witness, as if it would make any difference what one witness meant in answer to a double negative in view of the undisputed testimony that

Long had to be used at twice the desired clearance because he could not be used at the necessary clearance, and in view of the clear description in the Long patent under which his webs are and must be rigid in use.

To begin with it must be remembered that mere flexibility in a web is not sufficient. The flexibility must be such that the web will yield before the pressure becomes great enough to cause the piston to stick in, or score, the cylinder wall. Mere flexibility is unimportant. Most anything is flexible—a crow bar is flexible, for example—but both crow bar and Long webs would not flex within the limits necessary to prevent the seizing and scoring. Long so described his webs in his patent, whereas Jardine described his very clearly as bending under the reaction force of the cylinder walls (R. pp. 1296, ll. 22-25, for example).

Perhaps a little analysis would help in this hair-splitting dispute of whose theory as to the answer to the unwinding of the double negative is the correct one. Perhaps a little consideration of the background of this question and answer would be enlightening. It must be remembered that counsel and witness were engaged in one of those rapid-fire question and answer controversies that more often lose than find the facts. Such a controversy more often becomes a private contest for dominancy in a colloquy than an effort to ascertain the true facts upon which justice can be reached. Moreover, the issue was confused by the fact that sometimes the colloquy was about the flexing of piston parts in cylinders and sometimes under a clamp, in other words, whether or not the webs would flex in a cylinder and again whether or not they would flex under a clamp which exercised many times the pressure at which the piston would stick in the cylinder.

The witness was insisting that the Long piston had, to his knowledge, been unsatisfactory and there had been constant complaint about it, that it was not better than a trunk type of piston and had had a short life. Opposing counsel was trying to oust the witness from these positions. Coun-

sel had pursued the witness through what amounts to about a dozen printed pages in the record (R. pp. 986, 995, 998, 1002, 1006-1010). All during this examination the witness stood his ground, giving the following questions and answers (R. p. 986):

"Q. You regard the Long piston, then, as not being any solution to any problem? A. *It is not a solution to the automotive piston problem, no.*"

* * * * * *

(R. p. 996):

"Q. Well, whether you had relief or not, the skirt would expand in the region of the wrist pin bosses more than at right angles to it? A. Yes, it would.

"Q. And it would begin to wear down, wouldn't it? A. *It would bear against the cylinder there.*"

* * * * *

(R. p. 1007):

"Q. Now, turning to the Long patent 1,872,772, one of your objections to this patent was it was too complicated. Is it more complicated than the Gulick patent structure? A. It is perhaps not more complicated in its structure, *but it is more complicated in its operation.*"

* * * * *

(R. p. 1009):

"What do you think caused that (rubbing) in Exhibit F, the sand cast piston? A. Well, it is a combination of clearance and temperature, has been such that the wall pressure has been high during operation in Exhibit F, and there is no evidence of very high wall pressure in Exhibit E. *I have seen many trunk type pistons with no slots at all that have the same kind of surface as Exhibit E.* Among other things, it is a matter of how much clearance the piston is given and the effectiveness of the lubrication.

"Q. As a matter of fact, the hard rubbing opposite the webs was caused by the fact, really, that *the webs expanded out and pushed that cylindrical part against*

the cylinder, isn't that right? A. *Yes.** But in order to do that the webs had to become quite hot, or the clearance of the piston had to be relatively small."

It was at his point hat counsel chanced the double negative question. The interrogating part of the question which for simplicity we divorce from the other part was as follows:

"What do you say, do you think the webs weren't flexible *enough*?"

The direct answer was:

"No."

Nothing in our minds could be clearer than that what the witness meant was that the webs of the Long piston were not flexible *enough* for use in an engine. If there could be any doubt upon this question it is explained by the preceding questions and answers which were to the effect that one of the Long pistons then in the hands of the witness which had been used showed rubbing opposite the webs from which the witness had testified that he had seen the same results from the performance of trunk type pistons which did not have any slots or any flexibility in them at all. All of this, of course, had reference to the operations of the piston when in use in a cylinder. If this conclusion needs any support other than what went on before, such support is found in the testimony of the witness following the question and answer to the effect that "the Long pistons were not satisfactory" and there were "repeated tales of how they weren't satisfied with the pistons" (referring to the Franklin Company).

The witness added to his negative answer the statement "there is flexibility in the webs." This, of course, did not change the answer that the flexibility was not *enough* for use in a cylinder; it merely added what is

* If the webs had flexed this wouldn't have happened.

perfectly obvious to anyone, that there is flexibility in the webs if you put enough pressure on them, just like there is in a crowbar. In view of the discussions of flexibility in connection with the clamp, the addition was necessary in order that counsel could not contend that the witness had said the webs were not flexible, whereas it could be shown that they were flexible under the clamp, for example, as was done in connection with other pistons. Even, however, if counsel's interpretation of the witness' statement "there is flexibility in the webs" be accepted, it cannot be divorced from the qualification "*enough*" found in the question, because the answer was not to a question asking if the webs were flexible, as counsel argue through their brief, but as to whether they were flexible *enough*. That the answer is negative to the question is not only clear from the common usage of a negative to such a question, when the negative is meant, and the consideration of the qualification which we have pointed out in the question, but the truth of an answer to the effect that the Long webs were not flexible *enough* is not only consistent with the balance of the witness' testimony, but with the testimony throughout the record, including that of the defendants' expert to the effect that the Long piston had to be used at double the desired clearance for the reason explained in the Long patent that the webs function to hold the skirt parts rigidly against the cylinder wall.

Therefore, the answer to this dialectic contention is that the witness said that the Long webs were not flexible *enough*, and that whether he said it or not, it is established not only by the other parts of his testimony to which we have referred, but the testimony of the other witnesses, including defendants' expert. It would not matter whether he meant that they were not flexible enough for engine cylinder, clamp, or crowbar use; his answer was that they were not flexible *enough*.

That Jardine's webs are flexible enough to bend under the pressure exerted by the cylinder walls before the pis-

ton will seize or stick is described repeatedly and at length in his specification. A number of times he says that he starts with and maintains a small initial clearance. He says his piston is deformed and deflected under the conditions of use without interfering with the essential functions of the piston. He says in the preferred form the webs bend in operation. Then he says (p. 2, ll. 22-25):

> "Thus the reaction force of the cylinder wall on the outer faces of the guide segments as the piston expands tends to cause bending of the web 6 along the said lines 13."

Then he goes on to say that with the bending of the webs the piston undergoes considerable thermal expansion without changing the small initial clearance and without scoring or seizing of the piston. Then, beginning line 89 on page 2, he expands upon this description, telling how "the reaction force of the cylinder wall on the outer faces of the guides" will even when there is a "relatively large thermal expansion" maintain this small clearance based upon the displacement which has previously been described as effected in part, at least, by the bending of the webs. He then tells how this can all be compiled.

The only description that Long furnishes of his piston is antithetical of this description. Long says in patent 1,872,777 (R. p. 1738) that his webs hold the separated portion 6 "outwardly against the forcing thrust of the connecting rod." He goes on to say, beginning line 32:

> "Inasmuch as the separated portions 6 will be *rigidly held against bending* against the forcing thrust of the piston from the connecting rod of the piston, the dividing slanting slots 7 of the pairs of separated portions 6 will prevent the wearing of a raised portion in the cylinder wall."

Here very plainly and definitely are descriptions of antithetical modes of operation in Long and Jardine. The evidence shows that as a result of these different modes of

operation the Jardine piston was a success at and the Long piston was a failure at the .002" clearance.

In these premises how trivial and unimportant becomes petitioners' effort to try to construe a double negative occurring in a single question and answer to mean something contrary to these clear descriptions of the operations in the two patents and the many pages of record supporting them.

Moreover, all this attempt to claim flexibility in the Long webs is repudiated by defendants' expert who testified that all the Long pistons Exhibit F, Exhibit E, Exhibit G, and that in the patent 1,872,771 were essentially the same in construction and principle (R. pp. 491-492). Since the patent 1,872,772 describes a web that is rigid petitioners are unhorsed by their own expert.

(9) On page 59 of petitioners' brief it is assumed that if Long did have flexible webs the claims of Jardine are invalid over the Long commercial piston.

There is nothing in the evidence to support such a conclusion; all the evidence is to the effect that there was lack of identity in structure, operation and results between Jardine and Long, no matter what were the characteristics of the Long webs (R. pp. 938-940, 986, 996, 1010).

The claims of Jardine recite other elements not found in Long. For example, claim 11 recites a skirt "cut away to expose substantially all of the sides of the web." This is not present in Long since the skirt of Long is not cut away to expose the webs in any of Long's pistons. Also "wrist pin bosses in the webs"; in Long the bosses are in the skirt and webs. Also "webs integral with the flange" of the piston head; in Long the webs are connected through the bosses and the skirt to the head flange.

These features of structure determine differences in operation and results; they also determined the difference between success in Jardine and failure in Long.

Petitioners' Inconsistency on this Review and on the Former Review is illustrated by the following at page 56 of petitioners' brief:

> "With such flexing webs known as familiar elements, as found by this court, *those skilled in the art would naturally have proceeded to make the webs of the Gulick* and Long patents *flexible*, if such web flexibility were desired."

In the first review, petitioners urged and induced this Court to accept the proposition that the Gulick patent did not teach those skilled in the art how to make the Gulick webs flexible, and for that reason this Court held that Gulick did not comply with the patent statutes which required a patentee to do no more than disclose his invention so that it could be reproduced by those skilled in the art. Nothing could be more inconsistent either with the petitioners' position on the former review and this Court's ruling on the former review than the above claim that those skilled in the art would naturally have proceeded to make the webs of Gulick flexible.

Now, in this cause, when petitioners desire to use Gulick and Long as prior art, petitioners have no hesitancy in saying that those skilled in the art would naturally have proceeded to make the Gulick and Long webs flexible.

Of course, the truth of all this is that those skilled in the art would naturally have proceeded to make both Gulick and Long with flexible webs.

We say this with all deference to what this Court said on the first review, but we still believe that we were right then and refuse to be inconsistent (we, like the Court of Appeals, accept here this Court's conclusion), *but the truth is, however, that one skilled in the art following the teachings of Gulick would have made the webs flexible enough to operate in a cylinder (and this is true of Maynard likewise), but in following the teachings of Long it would have been necessary to make the webs so rigid that they would not operate in a cylinder, though they might*

under a clamp, in order to preserve the desiderata of ruggedness and durability where a piston was cut up into six sections, four of which had no other support than through the webs, as Long did in both Exhibit F and the piston of his patent 1,872,772. Shorn of all preceding rulings, and all preceding contentions, those are the plain facts of the case—so plain that we repeat them. The Gulick disclosure is sufficient to teach those skilled in the art how to make a piston which would not only be flexible in the cylinder so as to maintain the narrow clearance of .002", but is rugged and durable. The same is true of Maynard, as was proven by the use of millions of such pistons under conditions which established the presence of all of these properties. The same is not, however, true of Long because anyone skilled in the art following the teachings of Long would necessarily make the webs so rigid as not to be flexible to prevent seizing at .002" clearance, in order to preserve the necessary ruggedness and durability of the six-sectioned Long piston to make it commercially useful, as shown by the fact that that is precisely what the Franklin Company did when it submitted to the .004" or .005" clearance in order to prevent sticking, to preserve ruggedness and durability, but with the result that they had to submit to the other set of evils, including the slapping of the piston.

But be the truth as it may, in no event do we think that one premise can be followed on the first review with respect to Gulick and the opposite premise be followed with respect to Long in this cause, the latter in total disregard of such necessary properties as ruggedness and durability.

The attack on the patentability and commercial use of the Jardine piston included under Point II in defendants' brief we reply to in our point (a) which follows.

POINT III.

WHETHER THE ALUMINUM COMPANY OF AMERICA SHOULD HAVE BEEN JOINED AS A PARTY PLAINTIFF FOR INJUNCTIVE RELIEF IS THE ONLY DOUBTFUL QUESTION IN THIS CAUSE.

In the decrees entered in these causes on the mandate of the Court of Appeals, issued after its first decision, it was held that the recovery against each of the petitioners would be so slight as not to justify an accounting, so nominal damages of One Dollar ($1.00) were awarded in lieu of profits and damages. This left injunctive relief the only relief of any value.

The Aluminum Company is an exclusive licensee to a particular field, i.e., the aluminum piston field, as counsel for petitioners say in their brief. The Jardine patent is, as the Court of Appeals said, dedicated by the patentee to the light weight metal field (Jardine patent, p. 1, lines 3, 5, 13-28; R. p. 2195).

We cannot dispute the fact that for all practical purposes the light weight metal, or light weight alloy, field is the aluminum piston field, and the Jardine piston has never been, and probably never will be, used or have any utility outside of the aluminum piston field, which is the field covered by the exclusive license to the Aluminum Company. We cannot fairly challenge petitioners' claim that the fields not covered by the license of the Aluminum Company are moot, and that the license, therefore, is, in effect, and for all practical purposes, a license to the entire field and the entire monopoly as far as that monopoly has any utility. It must also be conceded that if the Jardine claims were read in the light of the parts of the specification to which we referred, they must be limited for all practical purposes to aluminum pistons.

We are, therefore, confronted with a set of facts new to any cause with which we have been familiar or which our law searches can find, i.e., an exclusive license which in letter does not cover the entire monopoly, but which in

spirit does. This is true whether we regard the Jardine patent as broad enough to cover pistons made of other kinds of light metal or light alloy than aluminum or limited specifically to aluminum, since no such pistons except aluminum have ever been made and used commercially under Jardine, and probably never will be within the life of the Jardine patent.

The law points which arise, and such law as is on any of these points, are as follows:

(1) An exclusive licensee to all the fields and to the entire patent monopoly *must* be joined as a party plaintiff.

Waterman v. MacKenzie, 138 U. S. 252.

(2) An exclusive licensee to one of many fields of utility *may* be joined as a party plaintiff.

Radio v. Emerson, 296 Fed. 51 (C. C. A. 2);
Western v. Pacent, 42 Fed. (2) 116, 119 (C. C. A. 2);
Hawkinson v. Carnell, 112 Fed. (2) 396 (C. C. A. 3).

(3) Whether an exclusive licensee to one of many fields of use *must* be joined as a party plaintiff has not been settled so far as we are aware or can find.

(4) Whether an exclusive licensee for the sole field for which the patented device has any practical utility *must* be joined is likewise an open question as far as we are aware or can find.

(5) Whether an exclusive licensee for the sole field to which the patentee dedicates his patent *must* be joined is an open question as far as we are aware or can find.

We find no decisions on points (3), (4) and (5); the authorities cited by petitioners do not deal with such questions. *Daugherty v. Vickers* and *Kaiser v. General* relate to point (1) and *Hawkinson v. Carnell* relates to point (2).

As we understand the opinion of the Court of Appeals, its decision on this point rested on the failure of the peti-

tioner to except to the ruling of the Master against petitioners (108 Fed. (2) 115).

We cannot, however, deny that at the time the question of whether or not the Aluminum Company should be joined as a party plaintiff was before the Master, there were included in the cause at least three patents, i.e., Gulick, Maynard and Schmiedeknecht, not limited to the aluminum piston field, and the terms of whose specifications justified the conclusion that the patentees contemplated the use of their pistons in other field; indeed, it is probable that Schmiedeknecht contemplated no other field than the iron piston field. Therefore, the Master was not presented with the following precise questions, i.e., (1) must there be included as a party plaintiff to a patent infringement suit one who holds the exclusive license for the only field in which the only patent in suit has any utility, and, (2) to which field the patentee, in the only patent in suit, dedicates his invention?

These precise questions were never presented to the Master because the decisions of this Court and the Court of Appeals holding the Gulick, Maynard, Schmiedeknecht and Mooers patents invalid or not infringed, and leaving the Jardine patent alone in the case, have resulted in presenting those questions for the first time. They did not exist in the case before the holding of invalidity or non-infringement of such patents by this Court and the Court of Appeals subsequent to the Master's report.

Under the circumstances the normal procedure might be to remand the cause to the District Court with directions to reopen the cause to try to decide these novel questions, so that this Court, or the Court of Appeals, both of which are reviewing Courts, shall have a trial Court's decision of these precise questions to review. However, since this litigation has been pending for so many years, and has been in this Court and in the Court of Appeals twice, since the questions of fact involved are not in dispute and are undoubtedly complete, and since the sole questions to be considered

are questions of law, the respondent waives whatever right it might have to a remand and a trial on these precise issues, and consents to a review and consideration of these law points (3, 4 and 5) on this record; and we assume that the petitioners take the same view from the manner in which the questions have been brought to this Court.

In *Peters v. Bates*, this Court dismissed certiorari because, pending the suit, the plaintiff had lost any right to the cause of action. If the Court in the instant case should think that, pending this suit, the plaintiff has lost its right to sue alone because when the suit becomes one on the Jardine patent alone, the Aluminum Company is a necessary party,—then the Court may well apply the analogy of the *Peters-Bates* case, and dismiss the certiorari. There would be nothing left before the Court except the One Dollar agreed upon as damages in each case; and we anticipate that the Court will not wish to be required to go extensively into the merit of a Three Dollar case.

The Jardine Invention and the Jardine Patent: The factor that militates against the Jardine invention is its simplicity when viewed by the eye. To the medieval eye it is one with the flatness of the earth and the movement of the sun. It is to the medieval eye that the petitioners have appealed in their castigation of Mr. Jardine's work. If the Jardine invention it to be evaluated, or its status in the patent law to be fixed by the eye of the medival dialectition, then Mr. Jardine is just as well lost and our efforts would be just as futile as if evaluation was to be determined on the basis that his work and that of the Court of Appeals were now regarded as "sins of the past."

Of course, if the solution of the aluminum piston problem and the sustaining of patent protection on the invention that solved that problem now rates as "sins of the past," that is an end of this litigation for, manifestly, we have no case on that basis.

We quote again from Professor Hooton's book, "Twilight of Man," p. 24:

> "The innovator in the field of mechanical science is regarded with suspicion, fear, and hatred, *because his inventions* are misunderstood and because they seem to give him an unfair advantage and to *depreciate* the time-honored methods, inferior tools, and *less ingenuity of the ordinary workers.* These observations are valid in primitive societies and probably held true in civilized nations up *to the last century.* Only within that time have innovations become the rage because of industrialization."

Why "up to the last century"? The reason is that it was just about a century ago that there was first instituted an administration of the patent laws in the United States under which patents were sustained and which continued until recently. Such an administration was subsequently instituted in other European countries, but later relinquished in France and other countries, though continued in Germany. Although there have been patent laws in many other countries during the last century, there has been no industrial progress because there has been no fair administration of those laws. In other countries there has been neither patent law nor administration thereof. In none has there been industrial progress. It can be truly said that the industrial progress of a people during any century can be measured relatively and absolutely by the number of patents sustained in that country.

Previous history is just as unerring as current history in its proof. There was little or no inventing prior to the beginning of the "last century." An invention in a century was a high average.

Earlier peoples recognized the advantages of invention and three definite efforts were made to encourage invention.

The ancient Greek, or Hellenes, lauded the prowess of the inventor as they did the prowess of their athletes and

favor was sought by invention as by skill in the games. Some notable inventions resulted, but not a great deal was accomplished.

Around about the year One Thousand the Saracens or Moors undertook to encourage invention on the patron system, prevalent in England in the time of Dryden and Dr. Johnson, to promote and encourage literature. Considerable was accomplished, but the Crusaders terminated the institution.

Then the early patent laws were passed, but they were so poorly administered that the expense of unsuccessful litigation was added to that of pioneering and inventing; the general result was to make a Roman holiday out of the inventor. Few inventions resulted and there were no repeats after the inventor found that the laws were so administered as to perpetrate a fraud upon him. Inventors will not work for nothing, any more than lawyers or anybody else.

Jardine Operations and Results: To the untutored medieval eye all Jardine did was to split the Ricardo piston; to the modern scientific understanding, Jardine recognized that he would solve the long pressing piston problem if he were to split a piston of the Ricardo type (of all the hundreds of types that were then present), where and how he should split it, so that it would in use "bend," "flex," "deform," "deflect" and "displace" in and among its parts so that it would maintain all up and down and around its walls the same "very small clearance" between the relatively rapidly expanding piston and the relatively slowly expanding iron cylinder wall, so that the piston would neither slap nor seize in the cylinder, all without destroying or interfering with the ruggedness, the durability, and the staunchness of the piston. He did more than produce a piston that would maintain this very "small clearance" all over its wall surface between the unequally

expanding and contracting piston and cylinder wall—a thing that no one else had done before him—but he did so in such a way as to maintain the staunchness, the ruggedness and the durability of the piston. Naturally the splitting of the piston anywhere weakened it, and made it more flexible. The problem was not just to split the piston, but to split it so as to realize the necessary flexibility without injuring the piston. The problem was not only to make the piston more flexible, but to make it so without interfering with its ruggedness or its durability. Jardine met and conquered the anomalies of a flexible piston that was at the same time rugged, a weakened piston that was at the same time staunch, a sectioned piston that was at the same time durable. He not only achieved something that nobody else achieved, i.e., the .002" clearance, established and maintained, but at the same time he preserved all of the other requisites of the piston. To do these things Jardine took the heat that made the piston expand and used it to keep the piston from expanding. He reversed the effects of nature. He used two metals whose different coefficients of thermal expansion would cause them to meet and jam, but he kept them apart. He made them move in and out in coaction when nature had made them to move in and out in conflict. He deformed and displaced the skirt sections; he bent and flexed the webs and he employed the reaction force of the cylinder walls and the effects of heat to accomplish all of these things. He distributed the flexing to prevent its concentration with the well known wire breaking result.

His only mistake was that he made the piston simple to invite the medieval eye to disparage his invention and defeat his rights. It would be fairer to say that it was one invention to accomplish all the things that Jardine did and another invention to make the device simple, in which those things were accomplished, than to say he made no invention at all because his device is simple. Simplicity adds greatly to the merit, to the utility, and to the enrichment of the public of and by any invention. To have done all the things

that Jardine did in a complicated structure would have been a major achievement. To have done it in the simple structure transcends even a major achievement.

In all this ointment petitioners can find but one fly, as if an inventor must make a world in one day to keep a Court from depriving him of that reward, which Congress promised him and the Government has granted him. It is asserted that there will be some oil passing between the slippers in the particular embodiment of the Jardine invention illustrated in his patent. In another embodiment of his invention this was quickly cured, however, as illustrated in the drawing of the Maynard patent and in Exhibit 1 by the simple expedient of continuing the bottom of the skirt throughout the circumference, all of which, according to the petitioners, was nothing more than a mere mechanical expedient. It was, however, one of the merits of the Jardine invention that this could be accomplished without in any way interfering with the many other virtues which Jardine had added to the piston. In other words, he made the piston flexible enough to prevent the sticking and the seizing and at the same time made it possible to prevent the oil pumping.

This praise is not idle. It is supported by the undisputed history of the piston industry, recited in the excerpts from the opinions of the Court of Appeals which we have quoted heretofore in this brief (see pp. 30 to 32). One thing that this history shows, which the Court of Appeals did not comment upon, was the repeated efforts of the sponsor of the defendants to solve the piston problem independently of Jardine and its failure to do so. It is one of the anomalies of petitioners' notion of the proper administration of the patent law under the "sins of the past" doctrine that those who have exhausted their mechanical skill in undertaking to solve a problem and failed, should be permitted to come into Court, after the problem has been solved by someone else, and be heard with approval to say that it required no more than the exercise of mechanical

skill to accomplish what the successful inventor accomplished. It is so in this case. The sponsor of the petitioners who is defending this suit asserts that Jardine exercised no more than mechanical skill, although that sponsor was never able to do what Jardine did or to accomplish what Jardine accomplished by means which differed from the Jardine means (R. pp. 259, 260, 1074, 1077, 1079 and 1080).

Therefore, we say that if one evaluates the Jardine invention through understanding the important nature of his achievement and its high standard, his invention must be appreciated. Even the eye must recognize that an invention of high order was made from the history which the Court of Appeals has recorded and which stands undisputed in the District Court. Such a situation ought not to have to yield to any prejudices about the inadvisability and the sins of those who initiated and fostered the century to which Professor Hooton refers; this situation ought not to have to yield to such considerations as patent pools, or who is or who is not a licensee under the patent. It ought not to yield to technicalities if any exist.

Continuation of the century of industrial progress, referred to by Professor Hooton, and based, as he says, upon mechanical invention, is too important to subject it to the adverse effects of invalidating a patent covering an invention which has the merits and which has made the history of the Jardine invention for such technical reasons as are advanced by the petitioners. Continuation of that industrial progress is much more important than any temporary gain against either piston pools or big corporations that might result from the invalidation of the patent. After all, a patent sustained is an encouragement to the inventor and a promotion of this progress, whereas a patent invalidated is a discouragement to an inventor and a bar to such progress because it penalizes the inventor with unsuccessful litigation in addition to his expense of pioneering and invent-

ing, the very evil which delayed industrial progress for long years between the time the patent laws were first adopted and the time when they were administered in such a way as to sustain patents.

We have studied the nature, the accomplishments, the achievements, and the history of many of the inventions which were made during the century to which Professor Hooton refers and upon which the patents were sustained by this Court. The Jardine patent ranks high in all of these things when compared with these other inventions. True, neither the Jardine invention nor its consequences are as spectacular as some of these others. That is not because the problem was any less difficult, the solution any less startling, or the achievement any less important, but because science and mechanics have progressed to the point where important inventions are not so spectacular in the public eye, largely because they deal with things that a more limited number of people understand. For example, as a result of the solution of the aluminum piston problem, automobiles have come to run easier and faster, to be safer, to give less trouble, to have the life of the engine and other parts prolonged, etc. These things came gradually. Not a great many people knew about them. Many of us must stop and compare present-day automobiles with those of twenty years ago to appreciate that these advances have been made; few of us know how or why. Indeed, few people would realize these things unless they stop to think of the advance made in automobiles between 1920 and 1935, and those who did stop to think about it would not know the contribution made by Jardine's invention, which made the aluminum piston possible.

The Jardine Patent teaches all the required things we have said about the Jardine invention though it condenses what we have said, as it should in addressing the skilled where we must address laymen.

On the effects of deformation and deflection of the parts without interfering with such "essential functions" as durability, ruggedness, etc. Jardine says (R. p. 1295, ll. 21-28):

> "I have found that these difficulties can be overcome by constructing a piston with its skirt or guide portion *supported and slotted or divided in a manner to permit deformation and deflection of parts thereof without interfering with the performance of the essential functions of the respective parts.*"

Here he implies the even then well known truth that not merely slotting or dividing anywhere or anyhow will do, and declares that he slots and divides the piston in such a way as to preserve the essentials of the piston as well as to induce that deformation and deflection under which the minute clearance is realized. As we have said, some of the older pistons sacrificed these "essentials" in endeavoring to establish the minute clearance; others failed to do the latter trying to preserve the former, while still others sacrificed the essentials and never got the minute clearance.

On the question of minute clearance, he says (R. p. 1295, ll. 4-8):

> "The invention has for its chief object the construction of a light alloy piston which, with relatively *small initial clearance,* will operate satisfactorily *at all temperatures* in an engine cylinder."

He states the problem of sticking and scoring and being noisy (slapping) at Record page 1295, lines 8 to 12.

He illustrates two forms of pistons in which his invention may be embodied to "facilitate" "understanding" of his invention. Not just for the eye, but for the "understanding" (R. p. 1295, ll. 29-32).

He then describes the details of these forms in accordance with the requirements (*U. S. v. Societe, supra*).

He expands on the description of the operations based on deformation and displacement, declaring that it is "preferably" permitted by a "bending of the webs" (R. p. 1296, ll. 4-13).

He then explains how "the bending of the webs" in the preferred forms aided by displacement and deformation maintains the small initial clearance even when subjected to a considerable thermal expansion. It is explained thus (R. p. 1296, ll. 25-34):

> "Due to the *bending of the web* sections 6 and the forcing together of each pair of segments, the guide part of the piston may undergo a *considerable thermal expansion* without a corresponding increase in the outer diameter thereof and thus *a small initial clearance* can be used *without danger of scoring or seizure of the piston.*"

How the reaction of the cylinder walls on the piston walls aids the bending of the webs is described in the preceding lines (R. p. 1296, ll. 22-25).

The "bending" and "flexing" in the "cantilever" structure in these preferred embodiments is described (ll. 19-20, 45, 48-50).

Then, beginning in lines 89-115, there is an overall description dealing with these parts and their effects in maintaining this "very small clearance" and the compensation for the "relatively large thermal expansion" of the piston skirt provided by the displacement of the parts thereof resulting from the reaction of the cylinder walls.

We quote it (R. p. 1296, ll. 89-115):

> "From the foregoing description the operation of pistons embodying my improvements will readily be understood. It will be seen that an aluminum alloy piston embodying my invention can be fitted to the engine cylinder with *a very small clearance and that compensation for the relatively large thermal expansion of the guide section of the piston is provided by the displacement of the guide segments* which results from the reaction force of the cylinder wall on the outer faces of the guides. As above indicated the reaction force necessary to displace the guide parts and effect such compensation can readily be controlled by properly forming and proportioning the guide parts. In this connection it will be obvious to

the designer that account must be taken of such factors *as compression pressures, piston diameter and piston stroke as determining the lateral thrust to which the guide parts will be subjected. It is obvious that the compensating displacement of the guide parts should require a thrust great enough to insure adequate mechanical strength of the piston and small enough to obviate scoring of the piston and cylinder or seizure of the piston.*"

Here, then, is a complete, though succinct, scientific explanation of the Jardine invention, its principle of operation, its mode of operation.

Conclusion on Jardine's Invention and Patent: What layman shall say that it was mere mechanical skill to do what the most learned and skillful engineers, inventors and scientists had for years failed to do until Jardine did it?

The Court of Appeals said:

"The present record is conclusive of the long unsuccessful search for a light weight piston sufficiently durable to obviate the well-known disadvantages of the iron trunk piston in high speed engines. *There was much research and experimentation by those most highly skilled, including the engineers of the Aluminum Company, Colonel Vincent of the Packard Motor Car Company, one of the designers of the Liberty engine, and the engineering staff of the Franklin Automobile Company, under the direction of the defendants' expert Stellman, its Chief Engineer.*"

* * * * *

"Ingenious, numerous and varied were the expedients resorted to in an effort to achieve the clearly recognized advantages of aluminum pistons, while at the same time avoiding troublesome results, and equally numerous were the failures, by reason of which a prejudice had developed in the industry against them, and it was said they had had a 'black eye.'"

To the presence of these factors the District Court and the Master agreed.

Petitioners, who themselves failed either to do what Jardine did, or to accomplish his purpose otherwise than by substantial duplication of the very forms in his patent, now ask this Court to assume the position of saying that it was all mechanical skill, and this Court, be its members laymen or not in the pertinent sciences, to declare that it was all easy to anyone.

Could any course fly so squarely into the face of history? Petitioners do not say how it would square with the truth and the facts.

Gulick and Jardine: Unless we read the Gulick webs as flexible on this review in these causes, although rigid on the first review in the same causes, Gulick has no bearing here. Gulick's web piston was never made, used or sold; its only (pre-Jardine) disclosure was in the Gulick patent application and then the webs were rigid (*Gayler v. Wilder*, 51 U. S. 477, 497).

Franquist and Jardine: Franquist has no webs; he operated on the accordion principle, a different principle from Jardine. Franquist did not get the required small clearance; the Franquist form was not practical and was not used; Franquist failed where Jardine succeeded. The patent law is administered on such facts, not what the plaintiff might have done about owning Franquist and relying upon it in previous suits which never went to trial. Such action was never a concession that Franquist was identical with Jardine in any way; nor could any such act change what is the truth; lawsuits are to be decided upon the truth. The plaintiff has brought suit on numerous patents in numerous causes, but this cannot be construed as meaning that these other patents were the same as Jardine.

Petitioners claim no estoppel in their favor because of any previous action, so that even if there were any merit to any of petitioners' claims in the premises, respondents' mouth is not closed to speak the truth about Franquist here

and now. What the Court of Appeals said about Franquist and Gulick applies here in comparing Franquist and Jardine now that this Court has rejected Gulick (see S. P. B., pp. 6 and 7; 92 Fed. (2) 334).

After all, some consideration should be given the rules of law by the complaining parties in a lawsuit; there ought to be a limit to the bad law that should be urged by self-appointed crusaders against patent pools and large corporations, who themselves would like as not join either if opportunity afforded.

Ricardo and Jardine: The comparison is no more than that between a corpse and a living man (*Consolidated v. Crosby,* 141 U. S. 441, 448) since even defendants' expert admitted that the principles are different (R. pp. 553, 554, 563, 574, 586, 587 and 589) and the evidence shows that the workers who failed had Ricardo before them (R. pp. 185-188, 458, 547, 548, 554, 575 and 1081).

Now lay lawyers ask this Court to assume that these men could have readily done what Jardine did—a proposition untrue on the face of this history.

Schmiedeknecht and Jardine: The corpse and live man analogy of this Court applies; Schmiedeknecht differed in structure, mode of operation and results from Jardine. If cut up in the manner now proposed by petitioners in the drawing at the top of page 15 of their brief, it would fall apart because there would be nothing to hold the head and skirt together.

Pomeroy and Jardine: Pomeroy was but an effort and failure to do what Jardine did (R. pp. 185-187 and 545). Pomeroy thought he might shorten his webs to allow for the pressure. His scheme was fantastic. It is a tribute to the Jardine success.

This Court is asked to reverse all this history and say that it had succeeded in solving the problem, when it had not.

Conclusion: We think the certioraries should be dismissed as moot; but if decision is to be on the merits we think history, as well as perhaps necessity, persuade, if they do not command, that invention must be encouraged in this country now as in the Nineteenth Century. We think it unwise to reject a policy under which there was success and readopt one under which there was failure if, as a matter of fact, we have any choice in the matter now.

We think such things as the questions of patent pools should be left to Congress, and the discipline of the Aluminum Company, if such is needed, left to the Courts in the "anti-trust" proceeding now pending against it in the Southern District of New York. We think these things, even if cognizable here, are mere bagatelles to the all important question of what policy in administering the patent law is to be followed—the successful policy of the Nineteenth Century or the failure policy of the Seventeenth and Eighteenth Centuries.

Jardine made an invention, under all the tests made and provided to determine the presence of invention, even those of the recent decisions of this Court; to say that a mechanic could have done what he did flies in the face of the truth.

Jardine's patent complies with all the requirements not only of patents, but of contracts.

We think the Court of Appeals acted wisely and should be affirmed.

Respectfully submitted,

A. C. Denison,

F. O. Richey,

Wm. C. McCoy,

Milton Tibbetts,

Counsel and Solicitors for Respondent.

APPENDIX A.

In the Supreme Court of the United States

OCTOBER TERM, 1940.

THE SCHRIBER-SCHROTH COMPANY,
Petitioner,
vs.
THE CLEVELAND TRUST COMPANY,
CHRYSLER CORPORATION,
Respondents.
No. 9.

THE ABERDEEN MOTOR SUPPLY CO.,
Petitioner,
vs.
THE CLEVELAND TRUST COMPANY,
CHRYSLER CORPORATION,
Respondents.
No. 10.

THE F. E. ROWE SALES CO.,
Petitioner,
vs.
THE CLEVELAND TRUST COMPANY,
CHRYSLER CORPORATION,
Respondents.
No. 11.

AFFIDAVIT OF WILLIAM C. McCOY.

STATE OF OHIO,
COUNTY OF CUYAHOGA, SS.

WILLIAM C. McCOY, being duly sworn, deposes and says:

I am and have since June 29, 1928 been a member of the patent law firm of Evans & McCoy of Cleveland, Ohio. I have since May 15, 1928 represented the Plaintiff, The

Cleveland Trust Company, with respect to the patents involved in this suit. During those years I have kept in close contact with the commercial work on aluminum pistons, familiarizing myself with the commercially important types and generally with the relative quantities of the different commercially important types of aluminum pistons which have been manufactured and used in the United States for original installation and for replacements, with the makers thereof and with the locations in which they are made.

By original installation I mean pistons which are placed in new engines made by automobile and engine manufacturers. By replacements I mean pistons which have been made, sold and used to replace other pistons for various reasons.

The piston of the type known as Exhibit 1 in this cause, either in the exact form shown at page 15 of petitioners' brief, or in slight modification, such as entitled "Maynard" on the same page, was used in large quantities both for original installation and replacement purposes beginning in the early part of the last decade. Its use exceeded One Hundred Million (100,000,000) pistons. Within the last five years this type of piston has gradually been supplanted by pistons of other types and largely by pistons of one or more of the types held not to infringe by the Court of Appeals in its last decision (108 Fed. (2) 109) until now I am told that no Exhibit 1 types are being manufactured for original installations. These pistons found not to infringe include Exhibits 8, 9, BBB, CCC, 3-J and 3-O; pistons of the type 3-O have more than any of the others supplanted Exhibit 1.

I have made an investigation of the present status of Exhibit 1 in the aluminum piston field and am informed through reliable sources and am convinced myself that at the present time no manufacturer of automobiles or trucks or of internal combustion engines, or anyone else, is em-

ploying Exhibit 1 pistons in original installations; a few of these pistons Exhibit 1 are being made for replacement purposes only; the quantity made and used is diminishing rapidly as the cars in which they were originally installed are being junked. The general opinion of those whom I have consulted, and in which opinion I concur, is that it will not be very long before they will not be made and sold at all except, of course, in relatively negligible quantities to the few people who continue to use old relic automobiles; I am informed and believe that none of these Exhibit 1 pistons are now being manufactured in the Sixth Circuit by the licensees of the plaintiff or others, except a few scattered numbers for replacement purposes; our reports are that outside of the Sixth Circuit a few are being manufactured to supply this diminishing replacement demand on the Pacific Coast and elsewhere; otherwise, according to my information and belief, none are being manufactured and sold at the present time and those being made and sold, as I say, are diminishing and will, in my opinion, terminate in the near future.

William R. McCoy.

Subscribed and sworn to before me this 30th day of September, 1940.

.....

Notary Public.

Commission Expires July 12, 1943.

BLANK PAGE

BLANK PAGE

FILE COPY

In the Supreme Court of the United States

Office - Supreme Court, U. S.
FILED
OCT 12 1940
CHARLES ELMORE CROPLEY
CLERK

October Term, 1940.

THE SCHRIBER-SCHROTH COMPANY,
Petitioner,
vs.
THE CLEVELAND TRUST COMPANY,
CHRYSLER CORPORATION,
Respondents.
No. 9.

THE ABERDEEN MOTOR SUPPLY COMPANY,
Petitioner,
vs.
THE CLEVELAND TRUST COMPANY,
CHRYSLER CORPORATION,
Respondents.
No. 10.

THE F. E. ROWE SALES COMPANY,
Petitioner,
vs.
THE CLEVELAND TRUST COMPANY,
CHRYSLER CORPORATION,
Respondents.
No. 11.

RESPONDENTS' MEMORANDUM OPPOSING PETITIONERS' APPLICATION FOR A WRIT OF CERTIORARI TO CORRECT DIMINUTION OF THE RECORD.

A. C. Denison,
F. O. Richey,
Wm. C. McCoy,
Of Counsel for Respondents.

The Gates Legal Publishing Co., Cleveland, Ohio

BLANK PAGE

INDEX.

RESPONDENTS' MEMORANDUM OPPOSING PETITIONERS' APPLICATION FOR A WRIT OF CERTIORARI TO CORRECT DIMINUTION OF THE RECORD 1

Petitioners' Failure to Comply With This Court's Rules 5

AFFIDAVIT OF WILLIAM C. McCOY 7

Authorities.

Rule 7 of the Rules of the Supreme Court 5

Rule 17 of the Rules of the Supreme Court 5

BLANK PAGE

In the Supreme Court of the United States

October Term, 1940.

THE SCHRIBER-SCHROTH COMPANY,
Petitioner,
vs.
THE CLEVELAND TRUST COMPANY,
CHRYSLER CORPORATION,
Respondents.
No. 9.

THE ABERDEEN MOTOR SUPPLY COMPANY,
Petitioner,
vs.
THE CLEVELAND TRUST COMPANY,
CHRYSLER CORPORATION,
Respondents.
No. 10.

THE F. E. ROWE SALES COMPANY,
Petitioner,
vs.
THE CLEVELAND TRUST COMPANY,
CHRYSLER CORPORATION,
Respondents.
No. 11.

RESPONDENTS' MEMORANDUM OPPOSING PETITIONERS' APPLICATION FOR A WRIT OF CERTIORARI TO CORRECT DIMINUTION OF THE RECORD.

We oppose the application for the following reasons:

(1) The blueprint copy sought to be added to the record in this case was in the record before neither the District Court nor the Circuit Court of Appeals. It was never received in evidence in the District Court.

The copy was marked for identification, Exhibit BB at page 455 of the record. Another blueprint copy was produced at page 670 of the record and offered in evidence as Exhibit BB-1. Objection was made that the two copies were duplicates of each other and counsel for petitioners then said: "I will leave it out." Exhibit BB-1 was thus withdrawn by petitioners' counsel and was, as we have said, never received in evidence.

The testimony on Exhibit BB failing to identify it, it was never offered in evidence. Defendants' expert witness, Mr. Stellman, to whom, and to whom only, it was exhibited, testified concerning it (R. p. 455):

> "I have no personal recollection of the making of that drawing.
>
> * * * * *
>
> "I have no personal recollection of when this drawing was made."

The drawing was omitted from the Court of Appeals record because it was never included in the District Court record and not for the reasons stated by counsel for petitioners in their application. Principal counsel for respondents advised principal counsel for petitioners that this blueprint copy was omitted and would continue to be omitted from the record because it had never been received in evidence and because it was not an exhibit in the case. Principal counsel for respondents never advised principal counsel for petitioners that it would be included in the record. Principal counsel for petitioners clearly understood at the time it was omitted from the record that such was the reason for its omission and never made any further protest or request that it be included in the record, though the case has been before this Court and twice before the Court of Appeals since that time. It is, therefore, clearly incorrect to say that counsel for petitioners understood or relied upon a belief that this blueprint copy would be included in the record. It is very clear also that it was not

omitted from the record through inadvertence, accident or mistake, but was omitted because it had never been received in evidence in the trial Court and, further, that this was clearly understood by counsel for both parties at the time it was omitted.

(2) The drawing is immaterial. The witness Castor testified (R. p. 671):

> "Referring to Exhibit BB-1, that piston (was)* not put into production. I know that."

Even if the drawing was included in the record before this Court, it would stand merely as a drawing of a piston without any evidence as to the date of the drawing, when the drawing was made, if it ever was, how often the drawing was changed after it was made, when the piston shown in it was made, of what it was made, etc. The only evidence regarding the piston is that it was never put into production.

There is no doubt that counsel for petitioners did not offer it in evidence after having it marked for the reason that in the light of the evidence (or lack of evidence) concerning it to which we have referred, its immateriality to any issue in the cause was recognized.

(3) The drawing is a copy and secondary. The original was never produced. Inability to produce the original is not established so as to establish a foundation for secondary evidence. Though the evidence on the existence of the original, like all the other evidence regarding the drawing, is indefinite or uncertain, it seems just as reasonable to conclude that the original was in existence at the time the copy was produced as to conclude anything else regarding the drawing (R. p. 670).

(4) In view of the other evidence in the case it is apparent that the drawing is either misdated or else, what

---

* The word "was" appears in the typewritten transcript (p. 1236); it was omitted in error from the printed record.

is more probable, was modified after the date which it bears. This evidence is discussed at pages 58 to 70 of respondents' brief.

The blueprint is dated "May 8-19." That this is not May 8, 1919 is clear not only from the uncertain markings after "19" on the drawing, showing that the "19" on the drawing means the centuries and not the years, but from the proof which shows that there was no such piston in 1919 (see pages 58-70 of respondents' brief). That the drawing was made later than 1919 is evidenced by at least two things; first, because it contains improved features not incorporated in the 1921 piston (R. p. 2271) and, second, because it shows a "die cast" piston, as the drawing says, and the Franklin Company was using sand cast pistons until the latter part of 1920 (R. p. 451).

The sentence quoted in the middle of page 2 of petitioners' application from the letter of February 25, 1935 must be read with the understanding that the blueprints marked Exhibits BB and BB-1 were not in evidence and, therefore, not "Defendant's exhibits," and that petitioners' counsel had been told that they were and would be omitted because they were not exhibits and not in evidence. Yet petitioners omitted each of these blueprints from the counter praecipe filed by petitioners (R. pp. 1273-79).

It results that this, a reviewing Court, is asked to include secondary evidence in the record that was intentionally and for good cause omitted by petitioners' counsel from the record before each the trial Court and the Court of Appeals. We doubt if this, a reviewing Court, would want to, or should, include in the record evidence which was not before either the trial Court or the Court of Appeals whose ruling this Court is about to review. We doubt if this would be proper even if the evidence were primary and material and there were an excuse for omitting it. Here not only is there no excuse for omitting the evidence in the District Court, but it was omitted intentionally to the full knowledge of counsel for both parties, first, because it was

not identified and, second, because it was secondary and immaterial.

Petitioners' Failure to Comply With This Court's Rules:

The certiorari to correct diminution of the record as shown in the petition filed by petitioners should have been filed in printed form, as shown in Rule 17 of the Rules of the Supreme Court which provides "no certiorari to correct diminution of the record will be awarded in any case, unless a printed motion therefor shall be made, and the facts on which the same is founded shall be shown * * *."

Rule 7 of the Rules of the Supreme Court states that all motions must be printed and that forty copies must be printed.

The procedure usually followed is to give opposing counsel fifteen (15) days' notice of the date selected for presenting the motion to the Court. The counsellor for the petitioner must appear in open Court and formally present the motion. No argument is permitted unless the Court especially directs it.

We have submitted herewith the affidavit of William C. McCoy affirming the facts stated in this brief.

We, therefore, think the application should be denied.

Respectfully submitted,

A. C. DENISON,
F. O. RICHEY,
WM. C. MCCOY,
Of Counsel for Respondents.

Cleveland, Ohio,
October 10, 1940.

BLANK PAGE

In the Supreme Court of the United States

October Term, 1940.

THE SCHRIBER-SCHROTH COMPANY,
Petitioner,
vs.
THE CLEVELAND TRUST COMPANY,
CHRYSLER CORPORATION,
Respondents.
No. 9.

THE ABERDEEN MOTOR SUPPLY COMPANY,
Petitioner,
vs.
THE CLEVELAND TRUST COMPANY,
CHRYSLER CORPORATION,
Respondents.
No. 10.

THE F. E. ROWE SALES COMPANY,
Petitioner,
vs.
THE CLEVELAND TRUST COMPANY,
CHRYSLER CORPORATION,
Respondents.
No. 11.

AFFIDAVIT OF WILLIAM C. McCOY.

STATE OF OHIO,
CUYAHOGA COUNTY, ss.

WILLIAM C. McCOY, being duly sworn, deposes and says:

That on Thursday, February 21, 1935, affiant conferred with Petitioners' counsel, John H. Sutherland, Esq., in connection with the narrative and praecipe for the Court of Appeals in the above cause; that during said conference of February 21, 1935, said Sutherland proposed that Defend-

ants' Exhibit BB be included in the praecipe and was advised by affiant at that time that Exhibit BB was not in evidence and, therefore, should not be included in the praecipe, and said Defendants' Exhibit BB therefore was not included in the praecipe sent to Petitioners' counsel on February 25, 1935.

That the subject-matter quoted from in Petitioners' brief from affiant's letter dated February 25, 1935 did not include exhibits that were not in evidence and did not refer to Defendants' Exhibit BB. That statement related only to other of Defendants' exhibits.

WILLIAM C. McCOY.

Subscribed and sworn to before me this 10th day of October, 1940.

FLORENCE KOFSKY,
Notary Public.

(Notarial Seal)

BLANK PAGE

BLANK PAGE.

FILE COPY

Office - Supreme Court, U. S.
OCT 18 1940
CHARLES ELMORE CROPLEY
CLERK

In the Supreme Court of the United States

October Term, 1940.

THE SCHRIBER-SCHROTH COMPANY,
Petitioner,
vs.
THE CLEVELAND TRUST COMPANY,
CHRYSLER CORPORATION,
Respondents.
No. 9.

THE ABERDEEN MOTOR SUPPLY COMPANY,
Petitioner,
vs.
THE CLEVELAND TRUST COMPANY,
CHRYSLER CORPORATION,
Respondents.
No. 10.

THE F. E. ROWE SALES COMPANY,
Petitioner,
vs.
THE CLEVELAND TRUST COMPANY,
CHRYSLER CORPORATION,
Respondents.
No. 11.

RESPONDENTS' BRIEF ANSWERING "PETITIONERS' REPLY BRIEF MAKING REFERENCE TO ADDITIONAL RECORD PAGES."

A. C. Denison,
F. O. Richey,
Wm. C. McCoy,
Milton Tibbetts,
Of Counsel for Respondents.

The Gates Legal Publishing Co., Cleveland, Ohio

BLANK PAGE

In the Supreme Court of the United States

October Term, 1940.

THE SCHRIBER-SCHROTH COMPANY,
Petitioner,
vs.
THE CLEVELAND TRUST COMPANY,
CHRYSLER CORPORATION,
Respondents.
No. 9.

THE ABERDEEN MOTOR SUPPLY COMPANY,
Petitioner,
vs.
THE CLEVELAND TRUST COMPANY,
CHRYSLER CORPORATION,
Respondents.
No. 10.

THE F. E. ROWE SALES COMPANY,
Petitioner,
vs.
THE CLEVELAND TRUST COMPANY,
CHRYSLER CORPORATION,
Respondents.
No. 11.

RESPONDENTS' BRIEF ANSWERING "PETITIONERS' REPLY BRIEF MAKING REFERENCE TO ADDITIONAL RECORD PAGES."

Petitioners have in their reply brief made six assertions and cited numerous pages of the record in connection with each. If it is sought thereby to create the inference that these portions of the record contradict our position, or support those of the petitioners, then such inference would lead to error. The contrary is the fact. It

is manifestly impossible for us to quote from each of the pages of the record to which reference is made. We, therefore, must content ourselves with citing a few excerpts only on each point. We adopt the numberings of the petitioners in answering the sections so numbered.

(1) On the subject of the structure and mode of operation of the accused piston, Exhibit 1, to secure a definite result, we cite the following (R. p. 125):

"Q. But you don't think even with that device you can even appreciably close the slot at the top of Exhibit 17? A. Appreciably, well, I don't know, but *I will say the difference of a thousandth of an inch in effective diameter is the difference between success and failure in piston improvement,* and I would question whether you could see a thousandths of an inch movement with the naked eye." (Emphasis ours throughout unless otherwise indicated.)

* * * * *

"Q. You can almost close it? A. Yes, I should say that that is *easily ten times as much as it would be called upon to flex in the motor.*

"Q. You think that that pressure you applied there is just about the pressure you would encounter in an automobile cylinder? A. No, I think that is probably ten times as much as would be applied in those particular directions.

"Q. You think the pressure in the automobile is ten times? A. No, I think the pressure I applied there. *I just mention that the degree of flexing is probably ten times as much as that piston would ever be called upon to flex in a motor.*" (Exhibit 17 is the same as Exhibit 1.)

Record page 261:

"Q. More web flexibility than Mr. Ricardo? A. Well, *Ricardo has no web flexibility,* because he has no place for the web to flex. *He has the rigid, non-flexible structure* whereas Maynard has a flexing structure."

(2) On the Jardine performance.

Record page 75:

"There is another way to help compensate for the excess expansion of the aluminum and that is by taking advantage of such *distortion* of the piston as may be produced by the differences in temperature of the different parts of the piston. *The Jardine construction represents an example of this.* When the piston head portion is heated to a high temperature, it expands more than the cooler skirt portion. Inasmuch as it is integrally connected to the skirt portion only in the region above the bosses, this entire head expansion tends to spread or increase the diameter of the piston in a direction parallel with the wrist pin boss.

"We may refer to two varieties of expansion: one as thermal expansion. This is the normal expansion of the metal as the result of being heated to a certain temperature. The other is mechanical expansion. That is the expansion due to mechanical forces, no matter what the origin."

Record page 140:

"A lot of these things that seem simple, seem to have escaped the imagination or the efforts of the best brains of the world for many years. So it isn't for me to say just what required ingenuity and what didn't, after the thing is twelve years or more old."

Record pages 142 and 143:

"No, there were thousands of alternatives. After a thing like this is once developed and then you see the final results, you may bring them down to a few alternatives; *but when people are trying to get these results and grapple in the dark, then there are thousands of alternatives.*

"Q. How do you know Jardine was trying to get these results? A. Because I had been connected with him in the same organization for several years prior to his achievement here.

"Q. And he was struggling along on the solution of this problem? A. Yes, he was, as were many other people.

"Q. But Jardine particularly was struggling? A. Yes, he was working hard on it.

"Q. * * * A. No; *the struggle began when the problem came with the excessive expansion of aluminum alloy pistons when operated in cast iron cylinders, and one only had to be connected with the piston business a few weeks to learn of that difficulty.*"

(3) This subject of the commercial success and public adoption of Jardine was dealt with at page 29 of our Main Brief here.

(4) On the deficiencies and derelictions of the Long piston.

Record page 676:

"Q. Will you state whether or not you yourself were working on this problem of trying to cure these troubles? A. *My gosh, everybody was working on them.* My job was inspector of the testing shed, I turned down the cars for the engine being noisy, and the experimental department, which was another division in the plant, would come over and try to give us a little help *with the grief we were having*, and make various suggestions, and bring over different things for us to put on.

"(Narrative continued) Besides the schemes I have named, that were used to try to rectify these troubles, we used to put an expanding jack inside of them, and throwed them aside, discarded them; and the fit of the wrist pin was changed from time to time, feeling, well, I suppose if we put a little drag on the wrist pin fit, the clearance, it would change the picture a little bit. *It was just one continuous thing to another; every week somebody had a suggestion and we would follow it through. And to make the aluminum piston stay in the Franklin engine, that was the whole thing, because it had some features—light weight over the cast iron; it was a nice piston to think about.*"

Record page 986:

"Q. You regard the Long piston, then, as not being any solution to any problem? A. It is not a solution to the automotive piston problem, no."

Record page 996:

"Q. Well, whether you had relief or not, the skirt would expand in the region of the wrist pin bosses more than at right angles to it? A. Yes, it would.

"Q. And it would begin to wear down, wouldn't it? A. It would bear against the cylinder there."

(See also pages 79 to 80 of our Main Brief.)

(5) On the deficiencies and derelictions of the other prior art pistons.

Record page 145:

"Q. What was the matter with the Ricardo piston? A. *It slapped when it was fitted loose enough so that it would not stick or seize. It seized when it was fitted close enough that it would not slap.* And it pumped oil."

Record page 203:

"A. The Franquist construction is not like the Jardine construction and is not designed to function like the Jardine construction. The vertical ribs and grooves in the Franquist construction are not the equivalent of the vertical slots of the Jardine construction."

Record page 263:

"Q. You make it a particular point that Hartog has no piston rings at the top and therefore that is one of the disadvantages of the piston? A. Oh, I should think the piston would be inoperable from that standpoint alone, if from no other."

Record pages 1025-26:

"Q. All you know, it looks like a picture in a magazine? A. Oh, no, I said that that looked like pistons which the Aluminum Company was testing of the Ricardo type.

"Q. And you say that cannot be cast in the permanent mold? A. No, I told you that by special effort a piston like that can be cast in a permanent mold. It requires four extra pieces in each mold to put in the regions around the inside of the head above the bosses.

"Q. And I suppose it is your position that even if you split one of these slippers the webs would be too stiff to do any good at all? A. That wouldn't make a good piston, if the slippers were slotted vertically.

"Q. Why not? A. *For the reason that the webs are too stiff.*

"Q. The webs are too stiff to flex? A. *Not too stiff to flex some, but they are too stiff to do enough good to make the piston work out.*"

(6) While, as shown at Record page 2108, certain of Jardine's claims were cancelled, he continued to claim combinations including webs which were flexible; he never, at any time, claimed "flexible webs" as such, but always, when interpreted in the light of his specification, as elements of his combinations.

It is not only incorrect to say that Dr. Jeffries admitted that his testimony regarding the wide commercial adoption and signal success of pistons embodying the Jardine invention was based on hearsay (at the page cited he said it was on records), but immaterial, because defendants' expert, Mr. Stellman, said the same things (R. pp. 462 and 471) and, based on personal knowledge, said that such pistons as Exhibits 1 and 17 did embody Jardine's invention (see R. pp. 82-84, for example).

Respectfully submitted,

A. C. DENISON,
F. O. RICHEY,
WM. C. MCCOY,
MILTON TIBBETTS,
Of Counsel for Respondents.

Cleveland, Ohio,
Oct. 15, 1940.

BLANK PAGE

BLANK PAGE

FILE COPY

Office - Supreme Court, U. S.
FILED
JAN 15 1941
CHARLES ELMORE CROPLEY
CLERK

In the Supreme Court of the United States

OCTOBER TERM, 1940.

SCHRIBER-SCHROTH COMPANY,
Petitioner,
vs.
THE CLEVELAND TRUST COMPANY,
CHRYSLER CORPORATION,
Respondents.
No. 9.

ABERDEEN MOTOR SUPPLY COMPANY,
Petitioner,
vs.
THE CLEVELAND TRUST COMPANY,
CHRYSLER CORPORATION,
Respondents.
No. 10.

F. E. ROWE SALES COMPANY,
Petitioner,
vs.
THE CLEVELAND TRUST COMPANY,
CHRYSLER CORPORATION,
Respondents.
No. 11.

AFFIDAVIT OF THOMAS E. ROBERTSON
and
SUPPLEMENT TO THE RESPONDENTS' BRIEF ON THE MOTION TO REMAND.

ARTHUR C. DENISON,
F. O. RICHEY,
WM. C. MCCOY,
MILTON TIBBETTS,
Counsel and Solicitors for Respondents.

THE GATES LEGAL PUBLISHING CO., CLEVELAND, OHIO

CONTENTS.

Affidavit of Thomas E. Robertson 1

Affidavit of Service 3

Supplemental Brief on the Motion to Remand 5

In the Supreme Court of the United States

OCTOBER TERM, 1940.

SCHRIBER-SCHROTH COMPANY,
Petitioner,
vs.
THE CLEVELAND TRUST COMPANY,
CHRYSLER CORPORATION,
Respondents.
No. 9.

ABERDEEN MOTOR SUPPLY COMPANY,
Petitioner,
vs.
THE CLEVELAND TRUST COMPANY,
CHRYSLER CORPORATION,
Respondents.
No. 10.

F. E. ROWE SALES COMPANY,
Petitioner,
vs.
THE CLEVELAND TRUST COMPANY,
CHRYSLER CORPORATION,
Respondents.
No. 11.

AFFIDAVIT OF THOMAS E. ROBERTSON.

DISTRICT OF COLUMBIA, SS.

THOMAS E. ROBERTSON, being duly sworn, deposes and says:

I am of mature age, and for twelve years, from April 1921 to June 1933, was Commissioner of Patents in active supervision of the United States Patent Office. While the application of Jardine, Serial No. 364,997, filed March 11, 1920, and resulting in issuance of patent No. 1,763,523, granted on June 10, 1930, involved in the above entitled causes, was originally filed before I was Commissioner, all

the proceedings relating to the interferences involving said Jardine application took place during my tenure of office. Owing to the fact that I was practicing before the Patent Office for thirty years before my appointment as Commissioner and because it was necessary for me to make rules and regulations governing all proceedings in the Patent Office during the twelve years of my Commissionership, in accordance with R. S. 483, I was familiar with the rules and regulations regarding the declarations of interferences.

It was the uniform practice in the Patent Office in interference cases that a claim in interference must be given the broadest construction its language would bear, this rule being made mandatory by decisions of the Court of Appeals for the District of Columbia, which then had jurisdiction of appeals from the Patent Office. In fact, under the mandatory control of the Court of Appeals any claim which was made the basis of an interference in which a plurality of applications was involved must necessarily be construed broadly enough to read upon each and all of those applications.

In Interference No. 49,578 there were involved five applications, namely, the aforesaid Jardine application, and applications of the parties Day, Spillman, Hartog and Long. In that particular interference the count, Claim 18 (19E), necessarily had to be construed by the Examiner broadly enough to read on each of those five applications in order to permit him to declare the interference. In fact, in interference proceedings, if at any time a different or limited construction is placed upon the issue of an interference such as to make it unreadable on any one of the applications involved, that very fact would necessitate the dissolution of the interference. The construction originally given to this claim in the Patent Office was never changed during the interference proceedings. As this claim was construed in the Patent Office only the elements directly stated were considered and no other elements were read into it.

I have examined the drawings of the Long and Spillman applications which were involved with Jardine in In-

terference No. 49,578. I have read the opinion of this Court in the above entitled causes, handed down on December 4, 1940, and have noted the construction given by this Court to Claim 18 (19E) which was the claim involved in that interference. If the claim had been construed in the Patent Office to include the expressions "retraction of the skirt from the bosses" and "balanced flexibility" it would have made necessary a dissolution of the interference for the reason that such expressions were not readable upon the structures of Long and Spillman.

Claim 18 (19E) was broad enough to read on all five applications involved in the interference. In contrast therewith Claim 8 of the Jardine patent is so narrow that it does not read on the Long and Spillman applications. The Patent Office did not allow any claims to Jardine which were broader than the said interference claim but did allow Claims 1, 8 and 15 of the Jardine patent which were narrower than the interference claim.

(Sgd.) THOMAS E. ROBERTSON.

Subscribed and sworn to before me this 11th day of January, 1941.

(Sgd.) MARY C. BEVANS,
Notary Public.

Affidavit of Service.

DISTRICT OF COLUMBIA, SS.

I, B. D. Watts, being duly sworn, depose and say that on January 11, 1941, I served a copy of the foregoing affidavit on counsel for petitioner by mailing such copy by first class mail, postage prepaid, and addressed to counsel for petitioner.

(Sgd.) B. D. WATTS.

Subscribed and sworn to before me this 11th day of January, 1941.

(Sgd.) MARY C. BEVANS,
Notary Public.

BLANK PAGE

In the Supreme Court of the United States

OCTOBER TERM, 1940.

SCHRIBER-SCHROTH COMPANY,
Petitioner,
vs.
THE CLEVELAND TRUST COMPANY,
CHRYSLER CORPORATION,
Respondents.
No. 9.

ABERDEEN MOTOR SUPPLY COMPANY,
Petitioner,
vs.
THE CLEVELAND TRUST COMPANY,
CHRYSLER CORPORATION,
Respondents.
No. 10.

F. E. ROWE SALES COMPANY,
Petitioner,
vs.
THE CLEVELAND TRUST COMPANY,
CHRYSLER CORPORATION,
Respondents.
No. 11.

SUPPLEMENTAL BRIEF ON THE MOTION TO REMAND.

A patent is a contract. There are two parties to the contract, i.e., the inventor, represented by his solicitor, and the public, represented by the Commissioner of Patents. The patent is a final memorial of the intention of the parties, just as is any other contract. We furnished an affidavit of the solicitor for Jardine in connection with our former brief and have submitted since an affidavit of Mr. Thomas E. Robertson who was Commissioner of Patents at the time the counts of the interferences, including 18 (19E)

were made, prosecuted and cancelled from the Jardine application. This affidavit is printed *supra*. Mr. Robertson's statement completes the evidence on the subject of the scope given these counts and particularly this count 18 (19E) when it was made in, prosecuted in and cancelled from the Jardine application. The evidence furnished by the two parties to the contract is the same. Mr. Robertson's affidavit establishes conclusively the following propositions:

(a) Claim 18 (19E) (like the other amended and cancelled claims) was never given the narrow construction that this Court gave it but, on the contrary, was given a broad construction and a construction which was broader than the allowed claims, and consequently Jardine did not abandon what this Court thought he had abandoned, on the basis of which thought its opinion in this case was predicated.

(b) That because of the disclosure in the applications of Long and Spillman, the cancelled and amended claim 18 (19E) could not have been given the construction which this Court gave it and that, therefore, the Patent Office did not allow broad claims after rejecting narrow ones, as this Court said (p. 8 of its opinion) but, on the contrary, that the Patent Office allowed narrower claims after the cancellation of the broad claims and, therefore, that this Court is mistaken in saying and holding as follows:

> "it does not appear why the Patent Office allowed the broad claims after rejecting the narrower ones." (p. 8 of this Court's opinion.)

This evidence of the two parties to the proceedings is directly affirmed by the action of the other four parties to the interference, since had the cancelled and amended claims been given the interpretation which this Court gave them and under which they would not have read upon either the Long or the Spillman disclosures, there would have been a Motion to Dissolve the interference by Long, by Spillman, by Hartog, or by Day on that ground. We will show, if given the chance, that though Long and

Hartog each made motions to dissolve, none were made on the grounds here involved. It results that the views of this Court upon which its opinion and holding are predicated are, therefore, contrary to the records, to the views of the Commissioner of Patents and Jardine's solicitor (the two parties to the contract) and to the other four parties to the interference.

The holding is also contrary to the views of the petitioners (defendants) who pleaded in the answers in these causes that the allowed claims were more limited and restricted than the cancelled claims. Thus we find in Section 33 of the Answers (R. p. 23) the following:

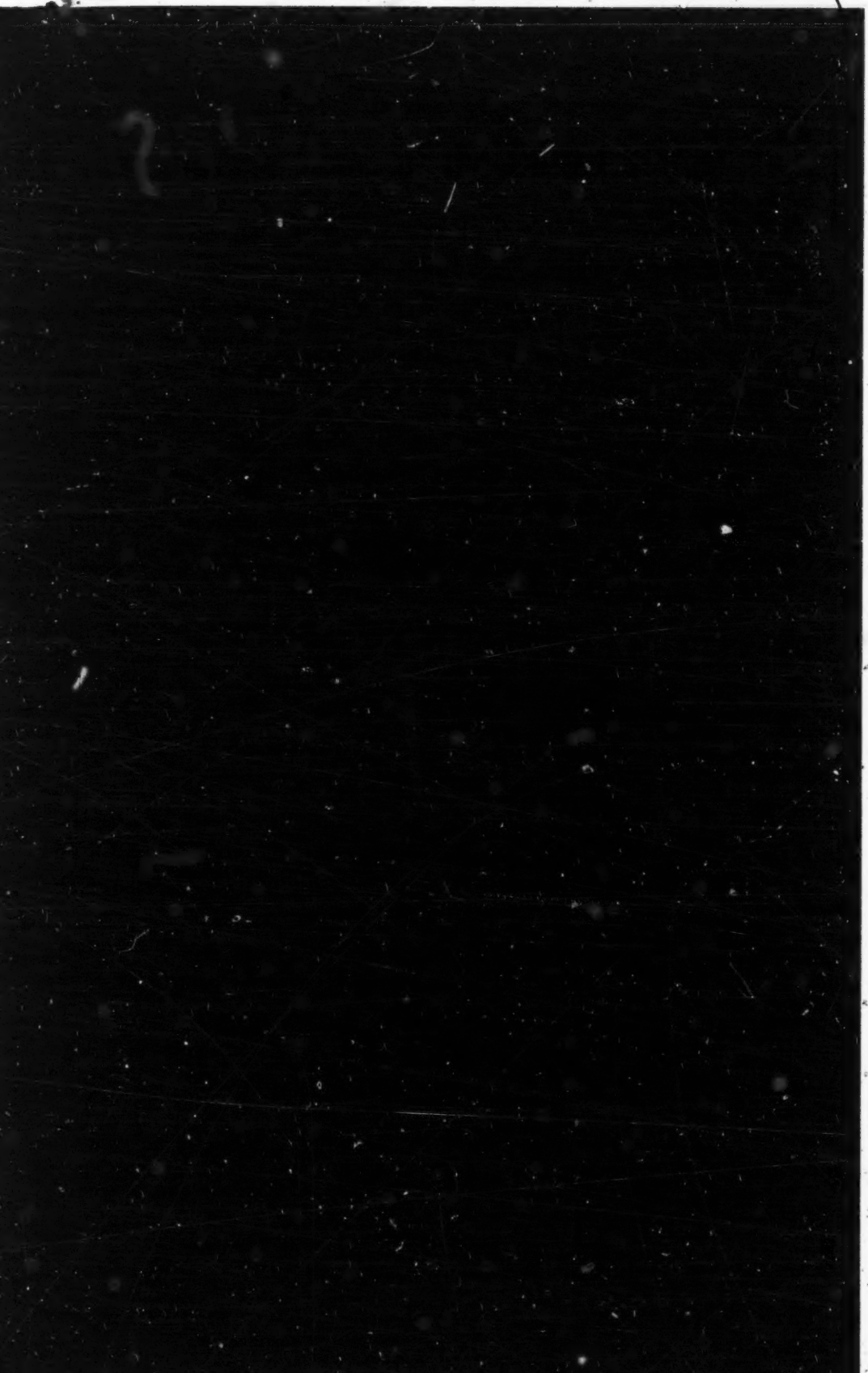
> "Further answering, defendant avers that during the prosecution of each of the applications of each of the patents in suit, the claims thereof were limited and restricted in the light of the prior art cited by the Examiner and on account of rejections by the Examiner;"

This latter proposition also confirms the statements in our brief on this motion that the issue upon which the Court decided this case was not pleaded. Section 33, from which we have quoted, not only shows that it was not pleaded, *but that the contrary was pleaded,* i.e., *the pleading made the issue and the only issue on this question, the proposition that the allowed claims were narrower and more restricted than the cancelled claims.* This Court's holding is just the reverse.

Manifestly, under the circumstances, the parties and the Court below are entitled to a consideration of this issue upon the evidence which bears upon it in order that the rights of the parties may be ascertained and sustained and justice done.

ARTHUR C. DENISON,
F. O. RICHEY,
WM. C. MCCOY,
MILTON TIBBETTS,
Counsel and Solicitors for Respondents.

BLANK PAGE



BLANK PAGE

INDEX.

File Wrapper Estoppel 3

The Features Stressed by this Court 5

The Practice in Interferences 8

Interferences with Gulick 10

Jardine Was Entitled to the Claims of the Patent 11

The Affidavits of Watts and Robertson Do Warrant a Different Decision or a Remand 12

Our Positions Have Not Shifted 15

Interference Record Estoppel is a very different defense from file wrapper record estoppel; claim interpretation in the light of an interference record is a very different defense from the interpretation of the claim in the light of the file wrapper record 16

"Additional Contentions in Respondents' Petition for Rehearing" 17

"Relative Breadth of Claims" 18

Patent Pool 19

(Appendix Petitioners' Brief, pp. I-XIV) 20

The Matter of Pleading 20

Conclusion 21

Table of Cases.

Altoona v. Tri-Ergon, 294 U. S. 477 ..... 2, 3, 19

American v. Brogdex, 283 U. S. 1 16

Connecticut Ry. v. Palmer, 305 U. S. 493 5

Crown Cork v. Gutman, 304 U. S. 159 5

Expanded Metal v. Bradford, 214 U. S. 366 ..... 7, 19

General Pictures v. General Electric, 304 U. S. 175 5

Furthermore, a mere provision of relief in these pistons would be insufficient, for even then the relief must be read into the cancelled claims *nunc pro tunc* and, if so, the claims would still not be coextensive with the allowed claims.

(2) Questions of file wrapper estoppel, construction of claims in the *file wrapper*, or the abandonment of claims in the file wrapper are not involved. The question involved is estoppel, construction or abandonment based upon *an interference record*. What was done with respect to the cancelled claims relied upon by this Court does not appear in the file wrapper. It does appear in the interference record. It is well recognized that where the file wrapper is resorted to for these various purposes what was done and said in the file wrapper are relied upon to ascertain the extent of the estoppel, what was abandoned or the construction of the claim. *Whatever was said about and done with respect to the cancelled claims relied upon by this Court appears in the interference record and not in the file wrapper.* No estoppel, construction or abandonment based on the interference record was pleaded and there is no evidence on this question before the Court. There was no occasion to present the evidence because that question was never considered until this Court took it up voluntarily after the arguments and briefs had been submitted in these causes.

(3) Estoppel, claim construction or abandonment predicated upon either file wrapper or interference record does not relate to single elements, but to the questions of the right to "revive" claims which have been cancelled or abandoned. All decisions on the questions are to this effect, including this Court's decision in *Altoona v. Tri-Ergon*, written by Mr. Justice Stone.

(4) The Court of Appeals stressed the retracted bosses just as much as the flexible webs.

(5) Even if relief were supplied to the pistons of Long, Spillman and Hartog, they would not operate like

Jardine or solve the problem which he solved. Indeed, each one would be inoperative and quick to destroy the engine.

(6) Without considering the disclosures of Long and Spillman, the interference counts are given a technical claim consideration. Only by considering the disclosures of Long and Spillman are they given an embodied invention interpretation.

(7) While a claim may be interpreted in the light of the specification to include the property of an element, structure may not be read into the claim. There is no inconsistency in these two positions.

(8) The evidence shows that the allowed claims are patentable in view of the cancelled claims. There is no evidence to challenge this proposition. It has first been asserted in the Petitioners' Brief on our Motions to Remand and Petition for Rehearing.

(9) Our positions have not been shifted except that we are not here urging matters which this Court decided against us. For example, we are not asking this Court to hold that the webs of Gulick are flexible; it is our adversaries who ask that.

File Wrapper Estoppel as stated by petitioners at pages 2 and 3 of their brief is, of course, not the law. Particularly is it not the law that the patentee will not

> "be permitted to change the scope of that claim in order to make out a case of either infringement or valdity."

The law is that the patentee, having surrendered a claim as a condition of the grant, may not recapture or revive the claim that was thus surrendered and abandoned, by resort either to the doctrine of construction or equivalency. The law was so stated in the decisions relied upon by the petitioners. For example, in *Altoona v. Tri-Ergon*, 294 U. S. 477, 492, 493, this Court, speaking through Mr. Justice

Stone, stated the rule as follows:

> "Nor can an interpretation be given the allowed claims which would *revive the claims* which were abandoned in order to obtain the patent. *Shepard v. Carrigan,* 116 U. S. 593, 597; *Roemer v. Peddie,* 132 U. S. 313, 317; *Royer v. Coupe,* 146 U. S. 524, 532; *Corbin Cabinet Lock Co. v. Eagle Lock Co.,* 150 U. S. 38, 40; *Morgan Envelope Co. v. Albany Paper Co.,* 152 U. S. 425, 429; *I. T. S. Rubber Co. v. Essex Rubber Co.,* 272 U. S. 429, 443; *Smith v. Magic City Club,* 282 U. S. 784, 789, 790; *Smith v. Snow, supra.*"

There is a far cry between construing a claim in the light of the specification without trying to revive a cancelled claim, and undertaking to construe the allowed claim for the purpose of reviving the cancelled claim. In the instant causes we have shown that the claim which was cancelled was not the same, and could not have been the same, as the allowed claim, and that we are not seeking to revive something that was cancelled. The error of the Court was in giving to the cancelled claim a construction which it could not have had and doing this in order to make out a case of claim revival.

In *I. T. S. v. Essex* the rule was stated by this Court (272 U. S. 444) as follows:

> "So where an applicant whose claim is rejected on reference to a prior patent, without objection or appeal, voluntarily restricts himself by an amendment of his claim to a specific structure, having thus narrowed his claim in order to obtain a patent, he 'may not by construction, or by resort to the doctrine of equivalents, *give to the claim the larger scope which it might have had without the amendments which amount to a disclaimer.' Weber Elec. Co. v. Freeman Elec. Co.,* 256 U. S. 668, 677."

Here again we have the statement that the allowed claim may not be construed so as to recapture the claim which was abandoned or be given the same scope as the claim that was cancelled or amended. There was no forbidding of a

construction of the allowed claim either to make out infringement or avoid invalidity as long as it was not such as to recapture what had been surrendered as a condition of the grant.

A close examination of the other cases relied upon by the petitioners and cited by this Court in these decisions will show that no Court has ever stated the rule as petitioners have stated it, but that it has always been stated and applied as we have stated it. The difference between the instant case and the cited cases are: we are not seeking here to recapture or revive what was cancelled. The affidavits of Robertson and Watts show that this could not be so.

The Features Stressed by this Court (Petitioners' Brief, pp. 5-7): In this discussion this Court is asked to violate the cardinal rule of patent law that a new combination of old elements is patentable where there is a meritorious result achieved. Petitioners thus depart from the issues decided by this Court and turn to the question of patentability which this Court specifically said it was not deciding (p. 9 of the decision).* Assuming that what might be broadly called a "relief" is old in pistons, not only is the Jardine combination employing relief as one of its elements new, but the use of Jardine's particular kind of relief for his purpose was new. In Jardine's combination, as in no other combination, the expanding head, to which the most heat is applied, moved the center of the web outward at the same time that its ends were retained by contact relation with the cylinder walls. This resulted in a distortion of the webs so as to bend them as fast as they expanded in length, thus absorbing the expansion in the bending. The particular kind of relief that Jardine em-

* And which it can not consider without overruling *General Pictures v. General Electric*, 304 U. S. 175, at pp. 177, 178; *Connecticut Ry. v. Palmer*, 305 U. S. 493, at p. 496; *Crown Cork v. Gutman*, 304 U. S. 159, at p. 161; and numerous cases earlier and later.

ployed in the particular place where it was employed contributed materially to this operation. Indeed, it was essential to the operation, just as the web, capable of being distorted and flexed, was also essential to this operation. Of course, all of the other elements of the combination were just as essential as the web, the web flexibility, and the so-called relief. No one element is any more essential or any more constitutes the main point and gist of the invention than any of the other elements. Remove any of them and the operation will not be realized.

The "balanced skirt flexibility" read into the claim by this Court is a result. It need not be recited in the claims and, as we have said, it was error to read it into the interference counts. With this proposition our adversaries agree. It was improper to read it into the claims of such applications as Long and Spillman who did not provide a combination for achieving the result of "balanced skirt flexibility" and, while it might be permissible under the opinions of this Court to read into the Jardine allowed claims a result capable of being achieved by the combination of elements recited in the claim, and by the Jardine disclosure, it would be highly improper to read it into a claim which not only did not recite the structure which would perform that function of "balanced skirt flexibility," but which, when read upon such constructions as Long and Spillman, as it must be read, would be interpreted as having a property or function which neither one of these could perform. That is where the mistake has been made, as shown by the affidavits of Robertson and Watts.

It follows from the discussion by both parties that the Court has read into the cancelled claim not only features of structure, but features of operations and results which were not only not possessed, but could not be performed, by such pistons as Long and Spillman, upon which the claims must read, by the imperative rule of construction. Therefore, not only is there a violation of the letter of the claims and claim reading, but of the substance of construc-

tion and operation. All of this is clear from the petitioners' resort to the claim that the element which this Court read into the claims was old in other pistons and to the claim that it is improper to read a feature of operation like "balanced skirt flexibility" into a claim.

The rule that a new combination of old elements is patentable where it achieves such results as "balanced skirt flexibility," the maintenance of minute clearances, etc., etc., which we have described in our discussions on the question of patentability in our Main Brief, is established by decisions of this Court ancient, intermediate, and current. The statement by this Court in *Expanded Metal v. Bradford* on this subject is typical of these cases. It is as follows (214 U. S. 366, 381):

> "It is perfectly well settled that a new combination of elements, old in themselves, but which produce a new and useful result, entitles the inventor to the protection of a patent. *Loom Company v. Higgins,* 105 U. S. 580-591."

The operation of the Jardine piston through the combination, including the particular kind of relief which Jardine employed, is illustrated in Fig. F below:

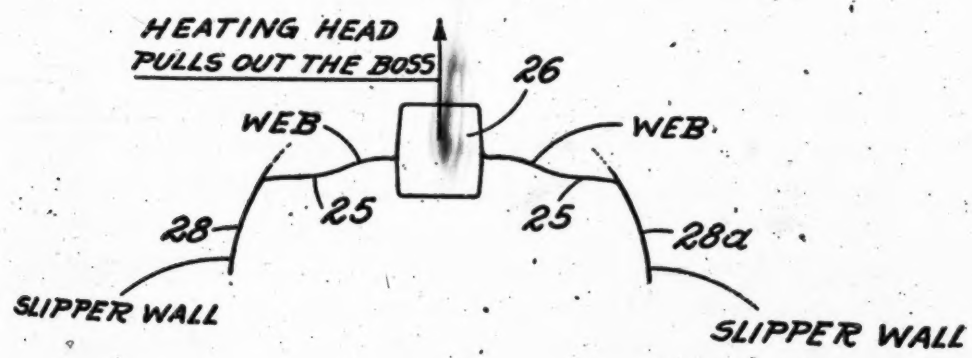


Fig. F

The head, of course, gets hottest because it is right under the flame. Consequently, the head expands outwardly, pulling the boss with it, as indicated by the legend on the drawing. The skirts contact through the oil film, the cylinder wall at the places where the web 25 joined them. This retards the ends of the webs with the result that they are distorted or bowed as indicated in Fig. F. This bowing compensates for the expansion; that is, as an aluminum web tends to expand longitudinally to increase its length, it is bent to shorten its length. Thus, the piston constitutes a heat engine which causes the piston to do the opposite from what nature would make it do. The specification of the Jardine patent describes this method of operation (see, for example, page 2, ll. 22-34). Of course, under well established authority, this operation is not required to be disclosed in the claim to make it patentable any more than the "balanced skirt flexibility," both being features of operations and results.

The Practice in Interferences (Petitioners' Brief, pp. 7 and 8): We find no denial of the practices as set forth in the affidavits we have filed, or as we have stated the practice. It is not denied that the count in an interference must be given the broadest interpretation its language will bear or that it must be read on the disclosures of all of the parties to the interference. It is contended that we are dealing with words, and that the interferences deal with tangibles. Nothing could be more tangible than the disclosures of the other parties to the interferences, such as those of Long and Spillman, which we have illustrated in the back of our Motions to Remand, and which were referred to in the affidavits. It is with these disclosures that we have dealt. It is true, as the Court of Appeals in the District of Columbia said in the *Dement* case cited by the Petitioners, that the contest is over "an embodied invention" and not "a technical claim." That is the reason

why this Court's decision is erroneous. A consideration of the cancelled claims without considering the disclosures of such parties as Long and Spillman, was a consideration of the claim as a "technical claim" or a group of words apart from the structures or "embodied inventions" upon which the claim was read and must have been read in its consideration in the Patent Office at the time it was cancelled.

Petitioners are then driven to asking this Court to read into the Long and Spillman disclosures a feature of structure, i.e., the reliefs. Not only is this violative of all the decisions of this Court, including the first decision of this Court in this litigation, but it would not help the situation if it were done, for the question here is not what somebody by arbitrary edict might read into Long or Spillman, but what construction was given the cancelled claims at the time they were cancelled; and regardless of what is done now, no relief was read into either Long or Spillman at the time the cancelled claims were made, prosecuted and cancelled.

The enormity of the offense which petitioners ask this Court to resort to, becomes apparent when it is remembered that this Court refused to construe a property, such as "flexible" into a patent disclosing a web which all experts agreed was flexible, yet this Court is asked to read into the Long and Spillman disclosures a feature of structure, i.e., "relief," which everybody admits, and which anybody, even a tyro, can see is not disclosed in the structure of either Long or Spillman and cannot be read into them without taking the Long and Spillman pistons out of their patents, changing them and putting them back. If this were permissible there would be no novelty in anything, because a Court could always take an old device and change it so as to make it the same as the novel device. We would thus have a rule of thumb which would defeat all novelty. There would then, of course, never be anything that was new.

These propositions are so wrong that they have seldom, if ever, been presented before. However, such decisions by this Court as *Topliff v. Topliff*, 145 U. S. 161, show that this Court will not entertain such a proposition.

The statement at the bottom of page 8 of Petitioners' Brief that "all pistons had reliefs in the region of their bosses long before Jardine" is wrong. For example, the pistons of Long and Spillman to which we have referred, did not have relief; neither did Hartog, also involved in the interference; neither did the trunk type of piston which was the almost universally used piston prior to Jardine. Neither did many of the pistons of the prior art in this case such as the Long piston (R. p. 709); Stellmann (R. p. 721); Van Bever (R. p. 590). Some such pistons did and some such pistons did not, but those which did only show that the particular element was old. None of them had the Jardine combination or were capable of the operations shown in Figure F above, or of the "balanced skirt flexibility," the maintenance of the minute clearance, or any of the other achievements of Jardine.

Interferences with Gulick (Petitioners' Brief, pp. 9-10): This discussion is also an attack upon the validity of Jardine; it is predicated upon this Court's blowing hot and blowing cold on the interpretation of Gulick, giving it one interpretation for the purpose of a patent in suit, as the Court did in its first decision, and giving it a second and different interpretation in this cause as a prior art reference.

We discussed this in our Main Brief (pp. 24 to 26). The statement at the top of page 10 that "balanced skirt flexibility" was found in all of the claims which Jardine lost in the interferences is simply not true. The evidence shows that not only is it not true, but that it could not have been true because the feature was not possessed by such

pistons as Long and Spillman. In other words, in order to make good the errors which will have been made, there will be a plural violation of the law and the facts; first, reliefs will be read into the Long and Spillman patents when they were not there; second, these reliefs will be Jardine's relief; third, the Jardine reliefs will be read into the claims which were cancelled when they were not there and, then, as a result of these things, "balanced skirt flexibility" will be read into the counts when it was not there, and after all of this is done Jardine will be presumed to have abandoned a claim thus reconstructed, and read upon the Long and Spillman pistons which have been thus reconstructed. We do not know that any court in a patent case was ever asked to run amuck to such a degree.

Jardine Was Entitled to the Claims of the Patent (Petitioners' Brief, pp. 10 and 11): Here again petitioners desert the grounds upon which this Court decided the case and the issue presented here and fly to a question of patentability—and this time to one never presented or discussed by any court in these causes.

The quick answer is that the structure in the cancelled claims was different from the structure of the allowed claims; the combinations are different from the structure and combinations of the cancelled claims and did not and could not operate as shown in Fig. F, for example, and could not maintain the minute clearance or other results of the Jardine piston and were failures where Jardine succeeded (here we interpret Gulick as this Court and Petitioners interpreted it).

Manifestly, the cited authority is not applicable since the Patent Office carefully adjudicated this question of the patentability of the allowed claims over the rejected claims, as did the parties to the interferences.

The rule applicable was stated by this Court in *Radio v. Radio,* 293 U. S. 1 and *Mumm v. Decker,* 301 U. S. 168, 171:

> "The issue of the patent is enough to show, until the contrary appears, that all the conditions under which a discovery is patentable in accordance with the statutes have been met. Hence, the burden of proving want of novelty is upon him who avers it. *Walker on Patents,* Sec. 116. Not only is the burden to make good this defense upon the party setting it up, *but his burden is a heavy one, as it has been held that 'every reasonable doubt should be resolved against him.'* Id., *Cantrell v. Wallick, supra; Coffin v. Ogden,* 18 Wall. 120, 124; *Barbed Wire Patent,* 143 U. S. 275, 284, 285; *Adamson v. Gilliland,* 242 U. S. 350, 353. *What must be so completely established by the defendant cannot be regarded as a part of the plaintiff's case which is to be set forth in his bill under the Equity Rule.*"

Certainly the presumption of validity will stand as against a claim of counsel unsupported by the record and made for the first time in a reply to a petition for a rehearing in the Court of final resort.

The Affidavits of Watts and Robertson Do Warrant a Different Decision or a Remand (Petitioners' Brief, pp. 12 and 13): We find no denial of what is said in these affidavits to the effect that there was no abandonment by Jardine of the thing that this Court said Jardine abandoned and upon which this Court's decision was predicated. There is no denial that Watts and Robertson are right in saying that the cancelled claim not only was not, but could not have been given the construction which this Court gave it. There is no denial that if given such construction it would not have read upon the disclosures of Long and Spillman upon which it was read from beginning to end in the Patent Office.

Petitioners' position is that this Court should read into Long and Spillman whatever reliefs were necessary to make

it possible to read those reliefs into the cancelled claims so as to make them coextensive with the patented claims. As we have pointed out, this would be violative of more rules of law and more facts than perhaps have ever been violated at one time before. Still, if it were done in order to cure the error that Jardine had abandoned something which he did not abandon, the claims would not be coextensive for the reason that still Long and Spillman could not operate like Jardine or get the Jardine results or achievements. They would still be failures where Jardine was a success. The Court is, therefore, invited to violate the law, the facts, and, in addition, the principles upon which the patent law was predicated, i.e., to reward the successful as against those who fail. Attempt is then made to draw a red herring across the trail by referring back to the flexible webs. The flexible web question was disposed of by this Court when it held that a patentee had the right to refer to his specification to interpret an element.

Counsel then state that the Court of Appeals did not find the relief to be "a distinguishing characteristic of the Jardine patent." The Court of Appeals found that the relief which the Court referred to as "retracted bosses" (top of page 9 in the Supplement to Petitioners' Brief), was an element of the claim just as was the flexible web; both findings were on the same basis. In our view, the question has been rather one of what the record shows than what the Court of Appeals said, because very often a Court does not say, in its opinion, all the things that are in the record. The record shows that the relief which Jardine employed (and which was not the common relief) is a distinguishing characteristic of the Jardine patent, and this is apparent from what we have said in connection with Figure F.

Again the authority cited is not applicable.

In the cited case *(Cosper v. Gold and Gold)*, the invention related to "a car heating apparatus." The car had

nothing to do with it except to be heated. The Court of Appeals of the District of Columbia held that under the circumstances it was not necessary to show the car. We would have an analogy in the instant case if somebody were to contend that Jardine should have shown the automobile which was to be operated by the engine in which his piston was used. An analogy in the cited case would have been present if some feature of the heating apparatus had not been disclosed in the patent. Counsel's position is a far cry from the recent decisions of this Court such, for example, as that in *Permutit v. Graver,* as well as in the first decision of this Court in this piston litigation. It would be difficult to find anything more inconsistent with the position of the petitioners throughout this litigation than the contention that a feature of structure not disclosed in a patent application could be read therein. Indeed, in *Permutit v. Graver* as it has been interpreted and contended for by the petitioners here, such a feature not only had to be shown in the drawing, but had to be described in the specification.

If, as plainly appears from the last ditch contention of petitioners, that a feature of structure must be read into the Long and Spillman disclosures (as well as into Hartog, another party to the interference showing no relief) in order to sustain this Court's decision here, then it is clear that remand is essential to the administration of justice, since, even if this error were overlooked and Jardine be held to have abandoned this rebuilt structure, evidence must be adduced to show identity between Jardine and such rebuilt structures.

With no evidence on the subject we are reluctant to assert our views and do so only that the Court may have the views of both counsel. **We assert with confidence that even if the Long, the Spillman and the Hartog pistons were supplied with the Jardine relief—they would be lacking in utility, would not be identical, or substantially identical**

with Jardine, and would be inoperative. Some of these things are so manifest as to be clear to the eye of the layman. If Jardine's relief were used in Spillman, there would be nothing to support the bosses; if Jardine's relief were used in Hartog, the two skirt parts (11) would be cut in two and half of each would fall away; if it were used in Long, the bosses, being supported at the inner ends only in the thin webs, would break the webs and there would be nothing to connect the head and skirt. In each case the engine would be ruined before it had been run a hundred yards.

If some other kind of relief were applied, regardless of failures of operations and results, neither Long nor Spillman would have such features as retracted bosses.

Our Positions Have Not Shifted (Petitioners' Brief, pp. 13-17) unless it can be said that we no longer urge such propositions as have been decided against us by this Court. For example, we are not urging here that Gulick and Maynard disclose the flexible webs to those skilled in the art because that question was decided against us. Nor are we urging that the Jardine patent covers certain pistons which the Court of Appeals decided it did not cover and on which question this Court denied Petition for Certiorari. We have never urged that a feature of structure could be read into a claim, much less into a patent application where it did not appear. We have always urged that a claim could be construed in the light of the specification and when so construed interpreted as reciting a property such as "flexible." There is neither inconsistency nor a shifting of position here.

Notwithstanding the red herrings that have been dragged across the trail in these causes, which might result in confusing one into believing that there is inconsistency between denying that *structure* cannot be read into a claim, on the one hand, and, on the other hand, that structure

already in a claim may be construed in the light of the specification, as possessing *properties* inherent in it, we have kept the line clear between these two contentions, for the first of which *McCarty v. Railroad Company* is authority, and for the other of which authority is found in such cases as *American v. Brogdex,* 283 U. S. 1 and the cases cited by this Court on page 5 of its recent decision in these causes. It is highly improper to read a feature of *structure* such as the "retracted bosses" or the "relief" into a claim, much less to modify a drawing to contain it, which did not otherwise contain it, on the one hand, and, on the other hand, to construe a claim reciting a web as having the *property* of flexibility inherent in that web in the light of the specification. These are the two rules that petitioners have confused and still confuse.

Interference Record Estoppel is a very different defense from file wrapper record estoppel; claim interpretation in the light of an interference record is a very different defense from the interpretation of the claim in the light of the file wrapper record. Even if everything the petitioners contend with respect to the necessity of pleading or not pleading file wrapper estoppel, and the sufficiency or insufficiency of the evidence thereon, were true, that would make no difference because both contentions as to pleadings and evidence relate to file wrapper record and not to interference records. There were claims in the Jardine application which were made and cancelled which were not counts of the interference and to which the file wrapper defenses apply. On these claims the file wrapper was sufficient evidence. However, as is shown by the affidavits of Watts and Robertson, this is not true of the counts that were in the Interference. *Indeed, the file wrapper which is the only evidence submitted by the petitioners is insufficient on the question of the interference defenses if it has any bearing upon the interference de-*

fenses at all. Likewise, any pleadings regarding the file wrapper defenses have nothing to do with the interference record defenses.

It results that even if everything defendants contend is true regarding the pleading and evidence on file wrapper estoppel (and not admitting it is true) there is no pleading that relates to either construction of claim or estoppel on the interference record, and not a bit of evidence on the interference record before the Court except the papers indicating that such an interference did exist.

Therefore, notwithstanding all of the contentions made by the petitioners, the cases should be remanded to include in the record at least the interference record if decision is to be based, as it is now based, upon estoppel, abandonment or claim construction which is, and can be only predicated upon the interference record.

"Additional Contentions in Respondents' Petition for Rehearing" (pp. 17-24 of Petitioners' Brief):

(c) It is true that we contended that the Ray Day piston infringed certain claims of the Jardine patent, but the Court of Appeals did not agree with us. Counsel contend that we should be bound by the construction of the claims which we urged in alleging that the Ray Day piston infringed. This would be to say that we could not now adopt the views of the Court of Appeals. It does not matter if this feature is old in some different combination from that of Jardine or the defendant.

(d) Claim 8 of the Jardine patent says that the piston is

> "provided with a longitudinal slit disposed between the ends of the webs."

This feature is not in the cancelled claim. While it is not important that this vertical slot should be right in the center, it is important that it should be between the ends of

the webs. Again it is immaterial that the feature is old in some other combination.

(e) Counsel are in error in saying that claims 8 and 11 do not recite the attachment of the web to the head flange. Claim 8 says that the webs are "integral with the flange" (R. p. 543, line 110). Claim 11 says the same thing (R. p. 544, line 17). This feature is not in the cancelled claims. Thus the allowed claims are narrower than the cancelled claims in that they contain, *inter alia*, the web attached to the head flange, the longitudinal slot located between the ends of the web, etc.

"Relative Breadth of Claims" (p. 21 of Petitioners' Brief): This Court did not say that these features were not in the Jardine patented claims. True, this Court said that the allowed claims did not recite "retraction of the skirt from the bosses," and while the claims did not use this language, they do recite this feature in the statement that the skirt is "cut away to expose the sides of the webs" (Claim 8), and "relieved adjacent said webs" (Claim 1) and "cut away to expose substantially all of the sides of the webs" (Claim 11). An additional feature of the allowed claims which is not in the cancelled claims was the *carrying of the bosses by the webs*, a very important feature, as is manifest from the examination of Figure F of this brief and from our discussion of the same.

There was no occasion to talk about radial flexibility in the term "slightly flexed radially" until after the opinion of this Court.

If we sought an interpretation of the Jardine claims broad enough to cover Exhibit CCC and have changed our position, it was because the Court of Appeals did not agree with us. Certainly the Courts will not construe a claim narrowly to hold non-infringement of Exhibit CCC and then turn around and hold the claim broad enough to cover Exhibit CCC to consider it upon the question of validity.

The discussion concerning a claim as a composite unit is a return to the question of patentability which is not now before the Court. All that counsel say, however, is that some combinations were not patentable. Nothing that is cited has any bearing upon the patentability of the Jardine combination which comes under the rule that a new combination of old elements is patentable where a new and meritorious result is achieved.

Counsel is as wild on the question of the law relating to supplemental oaths as he is on the effort to read structure into cancelled claims to make out a charge that something was abandoned that was not abandoned. Again the question of the supplemental oath applies to the combination and not to the elements.

Jardine's achievement of the small clearance is discussed in our Main Brief with ample references to the record to support the claim. We will not repeat them here, but ask the Court to consider the blue brief entitled "Respondents' Brief" on the main hearing if the Court wishes to consider this question on this record.

Combinations may not be sacred, but they are the rock-bottom basis of the patent law and its administration. When new, they are patentable regardless of the antiquity of their elements (*Expanded Metal v. Bradford, supra*); they are separate legal entities from their elements and from each other (*Leeds & Catlin v. Victor*, 213 U. S. 318); under the statute they define the invention (*Altoona v. Tri-Ergon*, 294 U. S. 477); they define invention independently of each other (294 U. S. 477); they measure the metes and bounds of the invention; the prosecution of the applications of the patents in suit and all other patents and the consideration thereof has been based upon these legal principles.

Patent Pool: Return is again made to the patent pool question; this and the incorrect allegations regarding the

same lead to the conviction that petitioners regard this defense as their real defense (Petitioners' Brief, pp. 10-11). There is something sinister about resort in every brief and argument presented by the petitioners to the patent pool with exaggerated and incorrect contentions to build it up, as if such things are to be weighed in the scales. We deem it unnecessary for us to make other reply than these notes.

(Appendix Petitioners' Brief, pp. I-XIV): Here are presented questions not brought before this Court by the certiorari: The briefs from which the excerpts are taken are not before this Court; this Court is not supplied with the evidence, the complete arguments or even the context of the excerpts. Indeed, this Court refused our petition for certiorari on most of the questions to which the excerpts relate.

If the contentions made in the appendix regarding patentability are proper here, they are mere repetitions of what was in petitioners' briefs on the main appeal in this Court and are answered in our briefs there and in the opinion of the Court of Appeals.

The Matter of Pleading: Our statement that the propositions upon which the Court based its opinion had not been pleaded as defenses at the outset did not particularly insist upon a lack of pleading as now controlling; it was a part of the history of the case, to show that this Court was asked to sustain a defense that had never been presented in any way to any court below,—which the bar has been taught this Court will not do.

Conclusion: Without dispute the allowed claims then recite at least the following features not in the cancelled claims:

(1) the cut away or relieved part of the skirt or Jardine relief or the retraction of the skirt from the bosses, as one wishes to call it,

(2) the location of the vertical slots between the ends of the webs,

(3) the connection of the webs to the head-flange,

(4) the carrying of the bosses by the webs.

These features were not in the cancelled claims when they were cancelled; if read *nunc pro tunc* into the cancelled claims (in violation of the rule in *McCarty v. Lehigh, supra*) the claims could not have been made by the other parties to the interference.

Rebuilding Long and Spillman to include Jardine's relief and then reading the Jardine relief in the cancelled claims would be insufficient, for, other of these elements and features would have to be incorporated in each of the Long, Spillman, Hartog and Day pistons and then read into the cancelled claims *nunc pro tunc*. Elements 1, 2 and 3 must be read into Spillman; elements 1, 2 (some are not) and 3 into Long; elements 1, 2, 3 and 4 into Hartog. Day is not before the Court. Moreover, some of these other elements and features would have to be read into some of these pistons and not in others. Somebody would have to make the selections and the incorporations; when the job was finished all would be *inoperative* and useless; all would be pistons which their inventors never conceived or designed.

Petitioners' resort to the request that elements and features be read into Long and Spillman emphasizes the necessity of remanding the causes, for, how, without evidence on the subject, is the Court to know that such changes as are proposed, if permissible, will not make the Long and Spill-

man (as well as Hartog and Day) inoperative, useless or different in substance from the disclosure of these applicants or otherwise inapplicable?

Respectfully submitted,

ARTHUR C. DENISON,
F. O. RICHEY,
WM. C. MCCOY,
MILTON TIBBETTS,
Counsel and Solicitors for Respondents.

BLANK PAGE

BLANK PAGE

Cases Cited.

Connecticut Ry. v. Palmer, 305 U. S. 493..... 2
Crown Cork v. Gutman, 304 U. S. 159..... 2
General Pictures v. General Electric, 304 U. S. 175... 2

BLANK PAGE

In the Supreme Court of the United States

OCTOBER TERM, 1940.

SCHRIBER-SCHROTH COMPANY, *Petitioner,* vs. THE CLEVELAND TRUST COMPANY, CHRYSLER CORPORATION, *Respondents.*	No. 9.
ABERDEEN MOTOR SUPPLY COMPANY, *Petitioner,* vs. THE CLEVELAND TRUST COMPANY, CHRYSLER CORPORATION, *Respondents.*	No. 10.
F. E. ROWE SALES COMPANY, *Petitioner,* vs. THE CLEVELAND TRUST COMPANY, CHRYSLER CORPORATION, *Respondents.*	No. 11.

RESPONDENTS' REPLY TO THE REJOINDER OF THE PETITIONERS ON THE MOTIONS TO REMAND AND THE PETITION FOR REHEARING.

It seems to us that this case has developed into a "stern chase," petitioners presenting proposition after proposition as the error of each preceding proposition is shown, as follows:

(1) It was contended that our expert had said that the webs of the Long piston were flexible, but the record

shows that what he said was that they were not flexible *enough* (this was the famous argument in re the unwinding of the double negative), while the Long patent described only rigid webs.

(2) It was contended that Jardine could not construe his webs as flexible in the light of his specification. This Court decided this point against the petitioners.

(3) It was then contended that terms in the claims in suit had been in claims made and cancelled in the file wrapper; in its decision this Court agreed with the petitioners to the extent of reading features into the cancelled claims. It has now been shown that this is not, and cannot be, correct (see the affidavits of Watts and Robertson). Petitioners have not supported the Court's views, but have sought other grounds upon which a decision adverse to the respondents might have been predicated, as follows:

(4) It was contended that this Court should take the Long and Spillman pistons and reconstruct them in order to cure the error in the Court's decision and to make out a new set of facts to which the decision could be applied; the same would have to be done with Hartog.

(5) The error of this fourth proposition having been shown, it is now contended that there is non-infringement.*

Petitioners are just as wrong on the question of infringement as upon the other questions presented.

The record shows that the only difference between the Jardine piston and the accused piston, Exhibit 1, is a matter of degree of operation. Experts for both parties testified to this fact, so that the "entirely different manner" in which the pistons are said by the petitioners to

---

* And which this Court cannot consider without overruling *General Pictures v. General Electric*, 304 U. S. 175, at pp. 177, 178; *Connecticut Ry. v. Palmer*, 305 U. S. 493, at p. 496; *Crown Cork v. Gutman*, 304 U. S. 159, at p. 161; and numerous cases earlier and later.

operate is merely a matter of degree. On this subject the petitioners' expert testified as follows (R. p. 258):

> "XQ. Now, you have said something about the relation between the flexing of the web at the top in Exhibit 1 and in the Jardine patent, and you said that there would be more flexing in the Jardine patent than in Exhibit 1. That would be *a difference in amount or degree*, wouldn't it?
>
> "A. Yes."

and (R. p. 263):

> "RDQ. Mr. Richey asked you on cross examination whether the flexibility of Exhibit 1 and the Jardine patent structure was one of degree, and I believe you answered yes. What did you have in mind when you made that answer, that the flexibility was the same?
>
> "A. *No, it was comparable in degree.*
>
> "RDQ. And how in degree?
>
> "A. *One might be more flexible than another in degree.*"

To the same effect is our expert's testimony. (R. pp. 39, 324-326.)

The operation illustrated in Fig. F in our last brief (i.e., the one with the green cover) and the description of the same there are fully expounded in and supported by the record. (R. pp. 37-40.) That infringement cannot be escaped by a mere change in degree is too well established and known to need citation of authority here.

It must be borne in mind that the amounts of flexing are minute. On this subject the record is as follows (R. p. 326):

> "The amount of flexibility found by micrometer measurement just now is considerable from the standpoint of piston clearance, which is measured in thousandths of an inch and some times in ten-thousandths of an inch."

This is one of the replies to the question and answer quoted at page 2 of the petitioners' rejoinder brief. The other

reply to this question and answer and to the contentions made in connection therewith is that they deal with a hypothetical structure. The answer shows that even when considering the hypothetical structure, flexibility would still be present and, notwithstanding every effort to stiffen the webs, the only result would be to increase the difficulty of securing successful operation. In other words, a patent suit ought hardly to be determined upon how difficult of operation someone, hostile to the patent, could by modifications make the structure. The practical question is how successfully the device can be constructed, and the general theory is that those who approach the proposition will do so with intelligence.

(6) We also doubt the wisdom of allowing to stand as the law of the land a decision predicated upon reasons which are so clearly shown to be erroneous that even petitioners seek to flee to other ills rather than suffer this one. We have pointed out the erroneous reasoning. The lack of confidence by the petitioners in the opinion is manifested by their effort to have the case decided upon other propositions, with the contention that it does not matter upon which proposition the decision rests, so long as the conclusion is the same. In other words, the petitioners recognize, as we do, that the statements in the affidavits of Watts and Robertson are correct and, being correct, this Court's decision cannot be correct.

(7) **Patentability of the Allowed Claims Over the Rejected Claims:** This question is presented for the first time in petitioners' rejoinder brief. It is proposed as another "life line" for the petitioners if the non-infringement argument fails. It is not raised by the Petition for Certiorari. The petitioners' contention is predicated upon misconstruction of the opinions of both the Circuit Court of Appeals and of this Court. It is corrupt in its premises, since mechanical novelty cannot be negatived merely by finding old words removed from their context.

Conclusion: We have no doubt that this brief will be followed by another brief from the petitioners presenting another and different proposition which is equally erroneous with each of the seven propositions which have already been presented by the petitioners. We ask to be excused from pointing out the errors in any propositions presented hereafter.

Respectfully submitted,

ARTHUR C. DENISON,
F. O. RICHEY,
WM. C. MCCOY,
MILTON TIBBETTS,
Counsel and Solicitors for Respondents.

BLANK PAGE

FILE COPY

Office - Supreme Court, U. S.
FILED
MAR 3 1941
CHARLES ELMORE CROPLEY
CLERK

IN THE

Supreme Court of the United States

Nos. 9, 10, 11. October Term, 1940.

No. 9.

The Schriber-Schroth Company, *Petitioner*,

v.

The Cleveland Trust Company, Chrysler Corporation, *Respondents*.

No. 10.

The Aberdeen Motor Supply Company, *Petitioner*,

v.

The Cleveland Trust Company, Chrysler Corporation, *Respondents*.

No. 11.

The F. E. Rowe Sales Company, *Petitioner*,

v.

The Cleveland Trust Company, Chrysler Corporation, *Respondents*.

MEMORANDUM FOR PETITIONERS IN RE RESPONDENTS' MOTION FOR LEAVE TO FILE AND SECOND PETITION FOR REHEARING UPON THE MERITS AND UPON THE MOTIONS TO REMAND.

John H. Bruninga,
John H. Sutherland,
Attorneys for Petitioners.

St. Louis, Missouri,
February 27, 1941.

Press of Byron S. Adams, Washington, D. C.

BLANK PAGE

INDEX.

	Page
In Answer to the Argument on Estoppel	3
In Re "Deformation" Bending	5
Material Difference	5
As to the Conclusion	6

CASE CITED.

Permutit v. Graver, 284 U. S. 52	2

BLANK PAGE

IN THE

Supreme Court of the United States

Nos. 9, 10, 11. October Term, 1940.

No. 9.

The Schriber-Schroth Company, *Petitioner*,

v.

The Cleveland Trust Company, Chrysler Corporation, *Respondents.*

No. 10.

The Aberdeen Motor Supply Company, *Petitioner*,

v.

The Cleveland Trust Company, Chrysler Corporation, *Respondents.*

No. 11.

The F. E. Rowe Sales Company, *Petitioner*,

v.

The Cleveland Trust Company, Chrysler Corporation, *Respondents.*

MEMORANDUM FOR PETITIONERS IN RE RESPONDENTS' MOTION FOR LEAVE TO FILE AND SECOND PETITION FOR REHEARING UPON THE MERITS AND UPON THE MOTIONS TO REMAND.

The "Preliminary Considerations" (pages 4 to 7 of the Second Petition for Rehearing) demonstrate that our adversaries are either unable or unwilling to understand what to us seems plain in this Court's decision. Being wrong in their "Preliminary Considerations", Respondents are

wrong in their argument and in their conclusions. The preliminary considerations are wrong as follows:

1. That Point (1) of the Petition for Writ of Certiorari did not involve a question of whether the proceedings in the Patent Office operated to make the Jardine patent invalid is perfectly apparent from a reading of Reason I (page 8), Specification of Errors 1 (pages 12, 13) and Point I of the Argument (pages 14 *et seq.*) of the Petition for Writ of Certiorari and Brief accompanying same, as well as the corresponding portions of our Brief on the merits. The point was not that the Patent Office proceedings rendered the Jardine patent invalid, but that the Patent Office proceedings precluded Respondents or the courts from reading flexible webs into Jardine's claims in order to make them valid when they were otherwise invalid.

2. In its opinion, the Court did not disapprove Petitioners' contention, but plainly stated the contention thus (page 7) "the question now presented is whether, in view of the amendments and their withdrawal, the patent can rightly be construed as including the flexible webs in the claims allowed"; and decided it thus (page 9): "the latter (the allowed claims) cannot be construed as including that (flexible web) feature".

3. This Court declared no rule of estoppel in its decision. In the footnote, page 5, Second Petition for Rehearing, it is pointed out that *Permutit* v. *Graver*, 284 U. S. 52, did not "mention file wrapper estoppel". *Neither did the Court's decision in this case mention estoppel.*

4. The Court did not decide that Jardine's claims should rightly be interpreted as implying flexibility of the webs, as stated by Respondents, but on the contrary the Court assumed (page 5 "that if in the present case the specification and claims of the patent were

to be interpreted without reference to its file wrapper history" the flexible web feature might be construed in. But the Court points out at page 7 that claims "must be read and interpreted with reference" to the file history. Even if we assume as the basis of all thinking upon the subject matter that at the time of soliciting and issuing of the patent, Jardine was entitled to a claim for the combination of the allowed claims plus flexible webs, it does not follow that, having failed to make such a claim, the patentee is now entitled to claim such a thing by construction.

5 and 6 are both dependent upon 3.

7. By its amendment of February 3rd, the Court simply made clearer what it had stated in its original opinion; namely that the surrender of a claim particularizing the flexible web feature precluded the construction of that feature into an allowed claim, especially when the Court below had found that the allowed claim was of zero patentability without it.

In Answer to the Argument on Estoppel.

Since the Court's decision does not depend on any technical estoppel, Respondents' arguments re estoppel* are empty.

The Court succinctly said, in both its original and its amended decision, that because of what happened in the Patent Office, flexible webs cannot be construed from Jardine's specification into his claims.

Thus the Court applied the familiar rule of interpretation or construction of ambiguous written instruments in

*We question the "principle" as stated by Respondents, (p. 7), because it seems to imply that no one is estopped by doing or saying a thing unless he realizes at the time that he is going to be estopped thereby. It is not essential that one should realize the legal consequences of his act in order that the act should constitute an estoppel, when acted upon by another. Such would be inconsistent with the maxim that ignorance of the law excuses no one.

the light of the negotiations—the giving and taking—which led to their execution.

To borrow from Respondents' bovine example regarding Bessie and Daisy* (pages 8 and 9) no court would compel B to take Daisy when "contemporaneous acts or papers indicate that A intended to sell, and B intended to buy, Bessie".

Our presentation, as well as the Court's disposition of this case was based upon the proposition that the negotiations between Jardine and the Patent Office, as reflected by the file wrapper history, showed that it was not the intention of the Patent Office, or the intention of Jardine, that his allowed claims should be patentably characterized by flexible webs (see Petition for Writ of Certiorari, pages 4 to 6 and 14 to 17; Petitioners' Brief, pages 29 to 35; and decision of the Court, page 7). See also pages 2-5 of Petitioners' Reply dated January 15, 1941, where we carefully point out the meaning of the familiar name (or possibly misname) "file wrapper estoppel".

Whether the file wrapper evidences a technical estoppel is beside the point, although we believe that it establishes all of the elements of an estoppel, to-wit:

(a) Jardine at one time claimed to be the inventor of a piston having "the common flexing or yielding bending." **

(b) The Patent Office ruled against Jardine, and he acquiesced in the ruling by cancelling his claims. He then proceeded to claim something else, but never con-

---

*We do not agree with Respondents' conclusion that A would not be estopped to deny that Bessie was the subject of the conveyance when the contemporaneous acts or papers indicated that "A intended to sell, and B intended to buy, Bessie."

**Respondents no longer argue that Jardine did not surrender claims to "the common flexing or yielding bending", (Second Petition for Rehearing, page 16), but now argue about "deformation bending."

tended* that the flexible web contributed to the patentability of the "something else".

(c) The Patent Office and the public, including these Petitioners, relied upon Jardine's acquiescence as a disclaimer** of any pretense that the flexible web contributed to the patentability, or constituted, a feature, of his alleged invention.

This was indeed a representation that Jardine relied upon things other than web flexibility as entitling him to a patent. The Patent Office and the public have acted upon that representation. As shown in Petitioners' Reply dated January 15, 1941, pages 14-15, Respondents contended, before the Master, in the District Court, in the Court of Appeals and before this Court, that flexible webs were *not* the distinguishing feature of the Jardine patent. So we submit that, although this Court did not rely upon it, Jardine is, in reality, estopped now to contend otherwise.

In Re "Deformation" Bending.

This is a new way of saying what was said in Respondents' green brief, which we answered, pages 1 and 2 of our Rejoinder Brief dated January 23, 1941.

Material Difference.

"Material difference" is not merely a difference in words—it is a difference in patentable substance. See "MATERIALLY (PATENTABLY)" page 5, Petitioners' Reply dated January 15, 1941. The synonymousness was not disputed by Respondent.

---

*"The only normal inference from such silence is either that it was deemed immaterial whether the (webs were rigid or flexing), or that if a (flexing web) is preferable, it was not claimed because it lacked novelty." *Permutit* v. *Graver*, 284 U. S. 52, l. c. 59.

**"Cancellation—amounts to a disclaimer" this Court's decision page 8.

The patentable substance of the allowed claims (without flexible webs) was found by the Court below to be nothing (O).

The patentable substance of the claims particularizing flexible webs, which Jardine surrendered, was something (X).

So the "material difference" is

X—O=X

As to the Conclusion.

Respondents' puffing about the wonders of Jardine's invention has no basis in the evidence. It is fully answered (p. 8) of Petitioner's Reply Brief dated October 19, 1940.

While Respondents have reviewed at length the equities in their favor, we deem it unnecessary to further burden the Court with a recapitulation of the equities in favor of Petitioners. This litigation has been not only vigorously contested, but prolonged probably beyond the expectation of either of the litigants. We hope it is now at an end.

It is respectfully submitted that the Motion For Leave to File The Second Petition For Rehearing should be denied.

Respectfully submitted,

JOHN H. BRUNINGA,
JOHN H. SUTHERLAND,
Attorneys for Petitioners.

St. Louis, Missouri,
February 27, 1941.

BLANK PAGE

BLANK PAGE

FILE COPY

In the Supreme Court of the United States

Supreme Court, U. S.
FILED
JAN 3 1941
CHARLES ELMORE CROPLEY
CLERK

OCTOBER TERM, 1940.

SCHRIBER-SCHROTH COMPANY,
Petitioner,
vs.
THE CLEVELAND TRUST COMPANY,
CHRYSLER CORPORATION,
Respondents.
No. 9.

ABERDEEN MOTOR SUPPLY COMPANY,
Petitioner,
vs.
THE CLEVELAND TRUST COMPANY,
CHRYSLER CORPORATION,
Respondents.
No. 10.

F. E. ROWE SALES COMPANY,
Petitioner,
vs.
THE CLEVELAND TRUST COMPANY,
CHRYSLER CORPORATION,
Respondents.
No. 11.

MOTION BY PLAINTIFFS (RESPONDENTS) (I) TO REMAND THESE CAUSES TO THE TRIAL COURT WITH DIRECTIONS TO REOPEN AND ADDUCE ADDITIONAL EVIDENCE AND TO CONDUCT THE PROPER PROCEEDINGS AS A RESULT THEREOF AND CONTINGENT THEREON AND (II) IN THE ALTERNATIVE, IN CASE THE MOTION (I) IS DENIED, TO REMAND THE CAUSES TO THE DISTRICT COURT TO RULE UPON THE QUESTION OF WHAT IT WAS THAT JARDINE ABANDONED IN CANCELLING THE INTERFERENCE COUNTS, MEMORANDUM ON THE MOTION AND AFFIDAVIT OF E. D. WATTS.

ARTHUR C. DENISON,
F. O. RICHEY,
WM. C. MCCOY,
MILTON TIBBETTS,
Counsel and Solicitors for Respondents.

THE GATES LEGAL PUBLISHING CO., CLEVELAND, OHIO

BLANK PAGE

INDEX.

MOTION BY PLAINTIFFS (RESPONDENTS) (I) TO REMAND THESE CAUSES TO THE TRIAL COURT WITH DIRECTIONS TO REOPEN AND ADDUCE ADDITIONAL EVIDENCE AND TO CONDUCT THE PROPER PROCEEDINGS AS A RESULT THEREOF AND CONTINGENT THEREON AND (II) IN THE ALTERNATIVE, IN CASE THE MOTION (I) IS DENIED, TO REMAND THE CAUSES TO THE DISTRICT COURT TO RULE UPON THE QUESTION OF WHAT IT WAS THAT JARDINE ABANDONED IN CANCELLING THE INTERFERENCE COUNTS.... 1

MEMORANDUM ON THE MOTION..... 3

AFFIDAVIT OF B. D. WATTS..... 9

Cases Cited.

Hewlett v. Steinberger, 1913 Commissioner's Decisions, page 372 .....4, 5, 8

McCarty v. Lehigh, 160 U. S. 110, 116..... 5, 6

BLANK PAGE

In the Supreme Court of the United States

OCTOBER TERM, 1940.

SCHRIBER-SCHROTH COMPANY,
Petitioner,
vs.
THE CLEVELAND TRUST COMPANY,
CHRYSLER CORPORATION,
Respondents.
No. 9.

ABERDEEN MOTOR SUPPLY COMPANY,
Petitioner,
vs.
THE CLEVELAND TRUST COMPANY,
CHRYSLER CORPORATION,
Respondents.
No. 10.

F. E. ROWE SALES COMPANY,
Petitioner,
vs.
THE CLEVELAND TRUST COMPANY,
CHRYSLER CORPORATION,
Respondents.
No. 11.

MOTION BY PLAINTIFFS (RESPONDENTS) (I) TO REMAND THESE CAUSES TO THE TRIAL COURT WITH DIRECTIONS TO REOPEN AND ADDUCE ADDITIONAL EVIDENCE AND TO CONDUCT THE PROPER PROCEEDINGS AS A RESULT THEREOF AND CONTINGENT THEREON AND (II) IN THE ALTERNATIVE, IN CASE THE MOTION (I) IS DENIED, TO REMAND THE CAUSES TO THE DISTRICT COURT TO RULE UPON THE QUESTION OF WHAT IT WAS THAT JARDINE ABANDONED IN CANCELLING THE INTERFERENCE COUNTS.*

Now Come the plaintiffs (respondents) and move this Court (I) for an Order remanding these causes to the trial

* (In the event that their (the petitioners') Petition for Rehearing, filed herewith, is denied.)

court with directions to that court and to the Court of Appeals to reopen the causes and take evidence submitted upon the questions presented hereinbelow with appropriate proceedings in the causes with relation to those questions after the adducing of the evidence:

(1) What was it that Jardine abandoned when he cancelled the interference claims, particularly Claim 18 (19 E)?

(2) What construction was given those claims when they were made, retained and cancelled by Jardine?

(II) In case the above Motion is denied, and in the alternative thereto, the plaintiffs move that the causes be remanded to the District Court for the court's ruling on the above questions on the present record for the reason that the question upon which this Court based its decision had never been decided by any court below.

A. C. DENISON,
F. O. RICHEY,
WM. C. MCCOY,
MILTON TIBBETTS,
Counsel and Solicitors for Respondents.

MEMORANDUM ON THE MOTION.

As the case now stands the following propositions are true:

(1) The thing this Court said Jardine abandoned was not the thing that Jardine abandoned, but different therefrom.

(2) The question decided here was never decided by any court below; it was not pleaded, no issue was made up on it, it was not presented for consideration, no evidence was submitted or received on it, and it was not considered or decided by any court below; controlling evidence is available.

I.

(1) In its opinion in this cause this Court said (p. 9):

> "But the amended and cancelled claims are to be read in the light of the specifications."

While this is true of the ordinary case, such as the claims and specifications of the patent, it is not true of a count of an interference, such as claim 18 (19 E) for the reason that the count of an interference must (A) be read *in the light of the specifications of all the parties involved in the interference,* on the one hand, and, on the other hand, (B) as a legal proposition is given the broadest construction that its language will bear.

(A) The first proposition is self-evident. In the instant case there were five parties in the interference (R. pp. 811 and 812). It is self-evident that in order for the count to be made by each of the five parties to the interference, it must be given such a construction that it will read on the disclosures of each. Now, this Court gave the count such a construction that there was included in it the following two features (p. 9 of this Court's opinion):

(a) "retraction of the skirt from the bosses," and

(b) "balanced skirt flexibility."

If these limitations (a) and (b) were construed into this claim it would not describe the disclosures of certain parties to the interference. It follows that the thing that was abandoned by Jardine was a claim that would read on the disclosures of all of the parties to the interference. Therefore, the claim that was abandoned was a claim without limitations (a) and (b) in it.

(B) As we have said, it is an inflexible rule in the Patent Office that a count to an interference will be given the broadest construction that its language will bear. This rule is stated by the Court of Appeals of the District of Columbia in *Hewlett v. Steinberger,* 1913 Commissioner's Decisions, page 372, as follows:

> "We fully agree with the finding of the Commissioner that the corrugations of Steinberger, being properly positioned, perform and were intended to perform substantially the same function of the so-called 'flanges' and 'collars' of the issue. The terms are therefore synonymous, as used in this record. *This conclusion recognizes the rule that claims should be given the broadest interpretation consistent with the terms.* (*Lindmark v. Hodgkinson,* C. D., 1908, 540; 137 O. G., 228; 31 App. D. C., 612; *Viele v. Cummings,* C. D., 1908, 362; 134 O. G., 777; 30 App. D. C., 455; *Miel v. Young,* C. D., 1907, 561; 128 O. G., 2532; 29 App. D. C., 481.)" (Emphasis ours throughout unless otherwise indicated.)

The rule has been followed for years, was followed during the Jardine interferences, and is still followed.

This rule was applied in interpreting claim 18 (19 E) in the Patent Office and, of course, under this interpretation did not include features (a) and (b). When this Court construed features (a) and (b) into claim 18 (19 E) it made something that had not been before the Patent Office, had not been in the Jardine application, had not been made by Jardine and had not been cancelled or abandoned by Jardine.

We have filed herewith an affidavit of Mr. B. D. Watts who was in charge of the Jardine application and the interferences in which it was involved and to which is attached the drawings of two of the parties to the interference. From these drawings it is apparent that neither of the parties to the interference, Long or Spillman, could have made the count 18 (19 E), as this Court has construed it, because neither has features (a) or (b). This is explained more in detail in the affidavit of Mr. Watts attached. The same thing is true of the Hartog disclosure which is shown at page 727 of the record and is explained by Mr. Watts.

It results that this Court's decision is, therefore, predicated upon an error and that the Jardine claims have been invalidated upon an erroneous presumption. It also appears that if given an opportunity we can show that this is true.

What we have said about the claim 18 (19 E) applies to all the interference counts or claims with some immaterial variations of the facts. The same legal principle applies to all. The broadest interpretation that the language of the claims would bear was given the counts under the rule in *Hewlett v. Steinberger, supra,* so that when the claims were made, prosecuted, cancelled and abandoned by Jardine, such was the interpretation of the claims and *to construe anything in them now which narrowed them over that interpretation would be to hold that Jardine abandoned something that he did not abandon.* The immaterial variations in fact would be due to the variation in parties in the various interferences.

In the comparison of the cancelled claims and the claims in suit this Court appears to have overlooked the fact that the claims in suit recite the bosses and the location of the bosses in the webs, structure not in any of the cancelled claims. This structure, by well established authority, cannot be read into any of the cancelled claims (*McCarty v. Lehigh,* 160 U. S. 110, 116). Unless this struc-

ture is read into the cancelled claims the patented claims would be narrower than the cancelled claims notwithstanding everything that has been said by the Court in a comparison of the cancelled and patented claims. This feature of structure is most important as is clear from the opinion of the Court of Appeals (top of page 9 of Supplement to Petitioners' Brief in this cause) and from the record (R. pp. 37-39). Even if no heed was to be paid to the rule in *McCarty v. Lehigh*, the cancelled claims could not be interpreted to include this feature because such pistons as Spillman, for example, do not disclose this feature of structure. Spillman's webs 18 do not have the bosses in them.

(2) The defense that Jardine has abandoned in the Patent Office the subject-matter of his claims in suit without the term "flexible" in them was never—

Pleaded,

Placed in issue or issue joined thereon,

No evidence was ever submitted or received on the question except what incidentally crept into the record in connection with other questions,

The evidence in the record is insufficient for the purpose of deciding the question; there is controlling evidence not before the Court,

The question was never argued, briefed, presented to or considered by the Master, the District Judge, or the Court of Appeals.

It was never decided by any of these tribunals.

In fact, we cannot find where the question was ever raised until this Court voluntarily raised it in its consideration of this case.

It results that the Court has decided a question predicated upon an erroneous assumption which was never pleaded, placed in issue or considered below. We have shown by the affidavit of Mr. Watts that evidence upon the question is available and that if that evidence were considered, the views of this Court must be reversed.

We recognize that it was defendants' burden to raise this issue and to present evidence on the question and ask for a ruling on the same and, not having done so, it is improper to raise the question in this Court. Nevertheless, since this Court has itself raised the question, we think that it should not be decided until evidence has been submitted to the Court upon which to arrive at a correct decision. It goes without saying that we also assume that this being a reviewing Court, the question ought to be considered and ruled upon by the courts below before this Court rules upon it.

We further submit that we have made enough showing through the affidavit of Mr. Watts to show that there must be a reversal of this Court's decision on this question and, therefore, on the entire case.

We do not submit the interference records at this time because they are voluminous and include the applications of all the parties to the interference. These, of course, can be submitted and, if this Court thinks it is necessary, we shall submit them, though we think in the interest of brevity the showing through the affidavit of Mr. Watts and the drawings attached thereto is sufficient to show the propriety of granting this Motion. The interference records are public records in the Patent Office and, as such, are available to this Court.

II.

As we have said, the question of whether or not Jardine abandoned the subject-matter of the interference counts and particularly claim 18 (19 E) as interpreted by this Court, was never presented to or decided by any court below. The specific question decided by this Court, i.e., that the Jardine patented claims 1, 8 and 11 were invalid on the grounds that resort could not be had to the specification to construe the webs as flexible because a claim so construed had been made and abandoned, was never

pleaded, presented to, or decided by any court below. In fact, we cannot find where it was ever presented to any court. It seems to have been raised for the first time by this Court in its decision.

We need not cite to this Court the fact that this Court is a reviewing Court and that in the administration of justice its ministrations are limited to reviewing and ruling. All we need cite to this Court is the fundamental principle of the administration of justice which requires that any question decided by a reviewing Court must have been placed in issue below, submitted to proof, and decided by the lower tribunals.

Therefore, even if the first portion of this Motion is not allowed, and the parties are not to be permitted to adduce evidence such as the interference records on the question, there ought to be a remand to permit the lower Courts to decide the question. We submit that in view of the rules stated in *Hewlett v. Steinberger, supra,* the lower courts must come to a different decision from this Court and that, therefore, the granting of the Motion would be controlling on the decision of the case. As the matter now stands the plaintiffs never even had an occasion to call the rule in *Hewlett v. Steinberger* to the attention of this or any other Court because, as we say, the question decided was never, as far as we have been able to find out, presented to or considered in this litigation until this Court took it up and made it the basis of its decision.

A. C. Denison,
F. O. Richey,
Wm. C. McCoy,
Milton Tibbetts,
Counsel and Solicitors for Respondents.

In the Supreme Court of the United States

OCTOBER TERM, 1940.

SCHRIBER-SCHROTH COMPANY,
Petitioner,
vs.
THE CLEVELAND TRUST COMPANY,
CHRYSLER CORPORATION,
Respondents.
No. 9.

ABERDEEN MOTOR SUPPLY COMPANY,
Petitioner,
vs.
THE CLEVELAND TRUST COMPANY,
CHRYSLER CORPORATION,
Respondents.
No. 10.

F. E. ROWE SALES COMPANY,
Petitioner,
vs.
THE CLEVELAND TRUST COMPANY,
CHRYSLER CORPORATION,
Respondents.
No. 11.

AFFIDAVIT OF B. D. WATTS.

STATE OF OHIO,
COUNTY OF CUYAHOGA, SS.:

B. D. WATTS, being duly sworn, deposes and says:

I am the B. D. Watts who was appointed solicitor of the Jardine patent, June 14th, 1920 (R. p. 759). Thereafter I conducted the prosecution of the Jardine application and supervised the conduct of the interferences in which the Jardine application was involved, including Interference No. 49,578, involving the count or claim 18 (19 E)

(R. p. 790) referred to by the Supreme Court in its recent opinion in the above entitled causes. The declaration of the interference appears at pages 811 to 812 of the record and, as shown, involved the applications of five people, i.e., Day, Spillman, Hartog, Jardine and Long.

I entered the employ of the United States Patent Office as Assistant Examiner in June or July 1915, and served as Assistant Examiner until September, 1917. Since then I have been employed as a patent attorney in soliciting patents, conducting interferences, etc., and am familiar with the Patent Office practice in declaring and conducting interferences as well as prosecuting patent applications.

Ordinarily a claim, such as claim 18 (19 E), called a count in an interference, is selected from an application of one of the parties involved in the interference and is suggested to the other parties. Occasionally, however, the count is framed or written by the Examiner and suggested to the various parties who become participants in the interference. On examining the records in Interference No. 49,578, I find that claim 18 (19 E), the interference count, did not originate in any application of any of the five parties whom I have named, from which I conclude that it was framed and suggested by the Examiner.

At the time a claim is suggested, the Patent Office takes the view that the claim is entitled to the broadest construction that its language will bear and that it is disclosed in the specifications and reads upon the drawings of each of the parties to whom it is suggested. Each party who makes the claim makes it with the understanding that it reads upon his drawing and is disclosed in his specification. When the claim is made by two or more of the parties to whom it is suggested, the interference is declared by the Patent Office on the theory that the claim is given the broadest construction which its language will bear and that it is described in the specification of each of those who make it and reads upon the drawings of each of those who make it.

From my own personal knowledge I know that this procedure was followed in the declaration of the Interference No. 49,578. During the early proceedings in the interference I became familiar with the pistons disclosed in the applications of each of the parties Day, Spillman, Hartog, Jardine and Long involved in the interference and was aware of the nature of these structures all during the proceedings in the interference. I attach hereto a copy of the drawing of the application of Long, Serial No. 317,273, which was involved in this Interference No. 49,578, which drawing illustrates the Long piston that was described in Long's said application. I also attach hereto a copy of the drawing of the application of Spillman, Serial No. 484,124 which was involved in that Interference No. 49,578, which drawing illustrates the Spillman piston that was described in Spillman's said application.

An examination of these Long and Spillman pistons shows that neither one of them illustrates a piston in which there is either "retraction of the skirt from the bosses" or "balanced skirt flexibility." An examination of the drawing of the Long piston shows that the bosses are rigid with and flush with the skirt, so that there is neither retraction of the bosses from the skirt nor of the skirt from the bosses. A further examination shows that a portion of the Long skirt is not only not flexible, but provisions are made for making it rigid. The portions 8 of the skirt are not only rigidly connected to the bosses, but the two bosses are connected together by a thwart 13 to insure rigidity in the skirt in the direction of the axes of the bosses, so not only is there not balanced skirt flexibility in this Long piston, but there is a part of the skirt which is not flexible at all.

The Spillman bosses are flush with and rigid with a portion of the skirt, just as in Long. In Spillman the portion of the skirt above the slots 15 and 16 is rigid across each diameter, so that Spillman has a portion of the skirt

which is rigid and therefore cannot have "balanced skirt flexibility."

When the count was made by Jardine, when it was retained in the Jardine application and when it was cancelled, it was understood by all parties involved, including Jardine and the Patent Office, that the count bore the construction, and only the construction, under which it described the pistons of all of the parties involved, including the Long and Spillman pistons. It would not have been possible to give the count the construction which this Court has given it and have it read upon either the Long or Spillman pistons involved in the aforesaid interference.

I have read the opinion of this Court and particularly the part contained in next to the last paragraph thereof and am familiar with the construction given this claim 18 (19 E) when it was made in the Jardine application, when it was retained therein and when it was cancelled, and I know that the claim that was abandoned and the subject-matter that was abandoned with it was a different thing from the claim as construed by this Court in its opinion, and the subject-matter included in the claim as construed by this Court. In other words, I know that the thing that was abandoned was not the thing that this Court has said in its opinion was abandoned.

I believe that if the cause is reopened and this evidence, including the interference record and the applications of the other parties to the interference are included in the record, all of this will be established and this Court will then see that it has decided the case upon the theory that Jardine abandoned something which is very different from the thing that he did abandon.

B. D. Watts.

Subscribed and sworn to before me this 30th day of December, 1940.

Florence Kopsky,

(Notarial Seal) *Notary Public.*

My commission expires May 5, 1942.

156/102 C

Fig. 1.

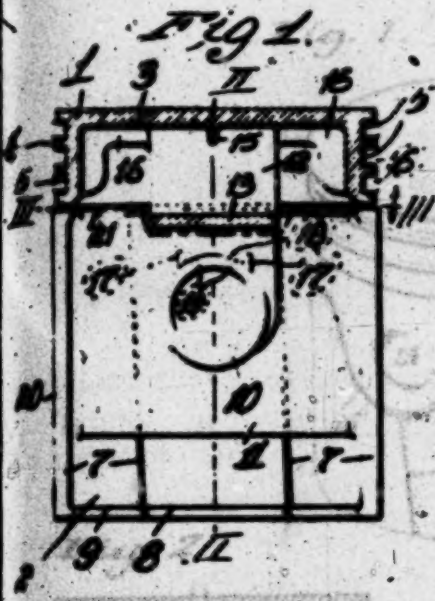


Fig. 2.

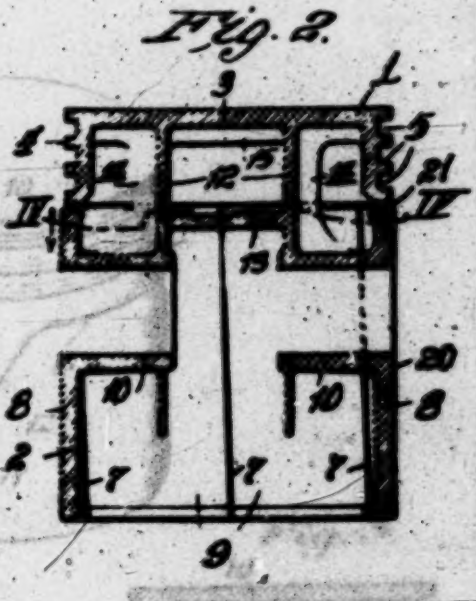


Fig. 3.

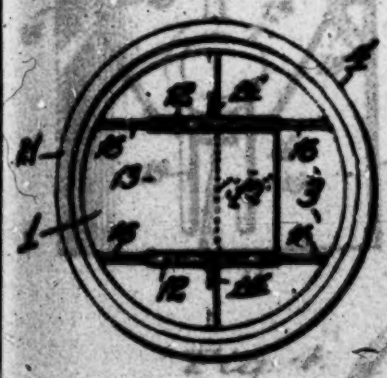


Fig. 4.

Inventor
Elmer C. Lang
By H. G. Gilbert

BLANK PAGE

FILE COPY

Office - Supreme Court, U. S.
FILED
JAN 4 1941
CHARLES ELMORE CROPLEY
CLERK

In the Supreme Court of the United States

OCTOBER TERM, 1940.

THE SCHRIBER-SCHROTH COMPANY,
Petitioner,
vs.
THE CLEVELAND TRUST COMPANY,
CHRYSLER CORPORATION,
Respondents.
No. 9.

THE ABERDEEN MOTOR SUPPLY COMPANY,
Petitioner,
vs.
THE CLEVELAND TRUST COMPANY,
CHRYSLER CORPORATION,
Respondents.
No. 10.

THE F. E. ROWE SALES COMPANY,
Petitioner,
vs.
THE CLEVELAND TRUST COMPANY,
CHRYSLER CORPORATION,
Respondents.
No. 11.

PETITION FOR REHEARING.

ARTHUR C. DENISON,
F. O. RICHEY,
WM. C. MCCOY,
MILTON TIBBETTS,
Counsel and Solicitors for Respondents.

THE GATES LEGAL PUBLISHING CO., CLEVELAND, OHIO

BLANK PAGE

INDEX.

Grounds for Rehearing 1

Preliminary 3

I. Claim Identity and Construction 4

II. Claim Breadth and Construction 16

III. The Converse Estoppel 25

IV. Claims as a Composite Unit 26

V. Other Errors in the Opinion 29

APPENDICES:

A. History of the Petitioners' (Defendants') Attacks upon the Jardine Patent, as Compared with the Basic Propositions of the Court's Opinion 32

B. The Morgan Envelope Case 35

Table of Cases.

Hewlett v. Steinberger, 1913 Commissioner's Decisions, page 372 24

Morgan Envelope Co. v. Albany Paper Co., 152 U. S. 425 ..... 25, 26, 35-36

Scaife v. Fall City, 209 Fed. 210 17

Thomas v. Rocker, 77 Fed. 420 36

BLANK PAGE

In the Supreme Court of the United States

OCTOBER TERM, 1940.

THE SCHRIBER-SCHROTH COMPANY, *Petitioner,* vs. THE CLEVELAND TRUST COMPANY, CHRYSLER CORPORATION, *Respondents.*	No. 9.
THE ABERDEEN MOTOR SUPPLY COMPANY, *Petitioner,* vs. THE CLEVELAND TRUST COMPANY, CHRYSLER CORPORATION, *Respondents.*	No. 10.
THE F. E. ROWE SALES COMPANY, *Petitioner,* vs. THE CLEVELAND TRUST COMPANY, CHRYSLER CORPORATION, *Respondents.*	No. 11.

PETITION FOR REHEARING.

To the Chief Justice and the Associate Justices of the Supreme Court:

The respondents in the above entitled causes respectfully ask a rehearing of the disposition thereof made by the opinion of the Court filed December 9, 1940, upon the following grounds:

I. The questions which the opinion made determinative were never presented to nor considered by any

court below nor presented to this Court by petition or brief, and respondents have had no opportunity to be heard thereon.

II. The Court erred in its statements and conclusions, in such opinion:

(1) That allowed claim 8 and cancelled claim 19E were equivalent (except for web flexibility).

(2) That allowed claim 8 (with web flexibility) was broader than cancelled claim 19E.

(3) That the invention of the patent was properly summarized in the opinion, though by such summary the Court in effect rewrote the claims in suit.

(4) That an estoppel arises by cancelling a narrow and accepting a broad claim.

(5) That a claim which is offered as and becomes a count in an interference with several applicants can be interpreted except by a construction which makes it applicable to the varying forms of all parties to the interference.

(6) That, by reading into it elements not specified therein, the Court has given to the cancelled claim a narrower construction than it reasonably bears, overlooking that it was proposed by the Patent Office as an interference claim, and that the law requires an interference claim to be given the broadest construction its language will bear, and such a construction that it will rightly comprise all of the various forms in interference (see p. 25, *infra*).

The reasons supporting these suggestions of error will now be stated.

The purpose of this petition is not only to seek a rehearing because of what seems to us erroneous reasoning by which the Court reached its conclusion upon the point thought determinative, but also to bring to the attention of the Court what we believe to be misapprehension of some facts relating to the Patent Office proceedings and to the

mechanics of and operation of the piston,—which latter errors, even if not controlling the result declared by the opinion, the Court will doubtless wish to correct (if correction there should be) to the end that the opinions of this Court may be as nearly as possible impeccable. To this result we believe it is the duty of counsel to contribute, by all pertinent respectful criticism.

Preliminary.

We feel specially justified in asking reconsideration and rehearing of the determinative portion of the opinion because its reasoning depends essentially upon two basic propositions: (1) that the claims cancelled were narrower than those allowed, from which proposition the Court develops the conclusion that the broader allowed claim cannot be construed as equivalent to a narrower cancelled claim, or (2) upon the alternative proposition that (under plaintiffs' construction) the claims allowed become equivalent to the claims cancelled. We respectfully submit that these propositions make their first appearance in this litigation in the present opinion of the Court. They were not presented in the petition or petitioners' briefs or in the oral argument, and we have never had occasion to discuss them. We do not pause now to demonstrate that we are correct in this statement, or to differentiate between these propositions and the proposition which the petitioners did present (belatedly) to the court below and then to this Court; but we make that demonstration, as we believe, in Appendix A, *infra* page 32.

The fact that these questions now arise for the first time is important for vital additional reasons. If in the District Court, by defendants' pleading, or in any way before the record was closed, it had been insisted either that the allowed and cancelled claims were equivalent or that the allowed claim was broader than the cancelled, plaintiff would have shaped the record to reply to these contentions.

There would have been the testimony of experts pointing out how the differences were material and how, practically as well as verbally, the cancelled claims were broader. Perhaps more important than this, the various interference records would have been put in evidence. Each one of the cancelled claims formed the count, or one of the counts of an interference. In some of these interferences there were rulings by the examiner of interferences or by the law examiner or by the appellate tribunals involving the scope and the construction of these cancelled claims and putting upon them the stamp of interpretation by the Patent Office tribunals. Under the familiar holdings of this Court these Patent Office interpretations would have been followed, unless they were very clearly wrong. The burden was upon the defendants in the District Court to allege and to show everything material to any existing defense; the plaintiff cannot be blamed for not making a complete record to overthrow a defense which had not been made at all. Counsel may not ordinarily refer to matters outside the record, but they may say what they believe they would have been able to show in opposition to a belated defense if it had been made while the record was open. We assert therefore that such expert testimony and such Patent Office proceedings would have materially supported and confirmed the argumentative inferences which we make from the present incomplete record. Some of these proceedings are shown in our accompanying motion.

I. Claim Identity and Construction.

It is the familiar fact that if the construction, later contended for by the patentee, of a claim retained and allowed, makes it of the same breadth and scope as the proper construction of an apparently broader claim cancelled and abandoned, the patentee cannot be permitted thus to recapture a definition of his invention which definition

he had once thus disclaimed,[1] but the court will give to the allowed claim a construction which will prevent such recapture. The controlling question therefore is as to the substantial identity of the claim, thus allowed and thus construed, with the claim thus abandoned. For the purpose of this consideration the court selected claim 8 of the Jardine patent (Op. p. 6) and claim [18] 19E of the cancelled and abandoned claims (Op. pp. 6 and 7),[2] and thereupon, in the first full paragraph of page 7 and in the first full paragraph of page 9, points out the reasons convincing the court that the two claims were subsantially identical, except for the "web flexibility."

In elaborating this substantial identity, the court said (p. 9): "* * * the amended and cancelled claim and allowed claims 1, 8 and 11 did not specifically mention retraction of the skirt from the bosses"; and the Court then assumed that this limitation could be read into both the allowed and the cancelled claim by reference to the appropriate specification and drawings. In both this reference to the form of the claims and in this assumption, the Court, we respectfully insist, was wrong.

As to the form of the claims, the fact is that this limitation *is* contained in the allowed claims and *is not* contained in the cancelled claim. The fact also is that this is a structural limitation, of importance as hereafter pointed out, and that in this very litigation this Court has affirmed and applied the rule that a limitation cannot be read into a claim. In thus reading this limitation into the cancelled claim the Court violates its own rule.

A reference to the record shows that in claim 1 this "retraction of the skirt from the bosses" *is* specifically

---

[1] Unless perhaps the effect of the cancellation may have been neutralized in the further progress of the application.

[2] It seems unnecessary to consider also separately the other claims sued upon, 1 and 11. Analogous comparisons would result.

mentioned by the equivalent language "a skirt integral with the said webs relieved adjacent said webs." In claim 8, it *is* specifically mentioned, by the equivalent language "a skirt integral with the said webs and cut away to expose the sides of said webs." In claim 11, it *is* specifically mentioned and expressed by the equivalent words "a skirt joined to the ends of the webs on opposite sides of the bosses and cut away to expose substantially all of the sides of the webs."

The drawings and specification of Jardine (R. p. 541) clearly show that the skirt, instead of being continuous and unbroken over the region of the bosses, is cut away or non-existent in this region, and thereby thermal expansion of the bosses upon their axial line, which might come out against the skirt and force the skirt against the cylinder, with disastrous results, if the skirt were there, is yet permitted to expand freely and without harm out to the very cylinder wall. This essential feature of the Jardine construction is described in the Jardine specification. (R. 541, ll. 65-70, *et seq.*). The skirt segments are located on either side of the bosses thereby declaring that they do not extend over the bosses. The specification does not use the word "relief"; but that was a name therefor familiar in the art to describe any degree of skirt retraction which might be appropriate to a particular construction. The word was proposed to the Patent Office in claim 1 as the appropriate word for this skirt retraction, and it was accepted by the Patent Office as properly defining this feature of skirt retraction. Its propriety for that purpose has never been challenged.

The phrase "cut away to expose the sides of said webs" in claim 8 is also not found verbatim in the specification, but is likewise perfectly appropriate to describe a skirt which does not extend over the bosses, and with that meaning the phrase was proposed to the Patent Office as a part of the definition of the invention and was accepted.

That it is properly descriptive of this feature has never been denied.

In claim 11 the phrase "cut away to expose substantially all of the sides of the webs" is of the same effect as the corresponding phrase in claim 8, save that, as to this feature, it is narrower in that it requires a somewhat greater degree of cutting away.[3] As the defendants have well said, claim 1 called for relief, claim 8 for greater relief, and claim 11 for extreme relief.

Jardine regarded this skirt retraction, or cutting away, or relief, as an essential feature of his invention, for he included it expressly or by equivalent words in eleven of his twelve claims in the issued patent. He had included it in several of his original claims (R. pp. 756, 757) by the equivalent language which specified that the pin bosses were opposite the unoccupied skirt space which was between the two non-continuous parts of the skirt. He never abandoned this feature, for it continued to be present in nearly all of his claims presented up until he accepted the amended claims to which the Court refers, and which were made by copying claims of other applicants pursuant to the suggestion of the Patent Office. In all of his amended claims which referred to flexibility (R. pp. 788-790), he did *not* include

---

[3] There is some confusion between retraction of the bosses from the skirt and retraction of the skirt from the bosses. These are two very different things. They may or may not coexist. The element or limitation "retraction of the bosses from the skirt" was a radial retraction and was a feature of the Gulick patent and of the claims in suit upon that patent and was used by the court below in describing what was then believed to be the invention of the Gulick patent. The Gulick construction (R. p. 528, Figs. 3 and 4) shows that the bosses might move outward slightly but would then come against the overlying skirt, with whatever evils might result from that almost immediate expansive contact. Gulick provided only a hole in the skirt "so that the piston pin may be inserted" (lines No. 100, p. 1 and 1 p. 2 of patent; R. pp. 530, 531). Jardine, on the contrary, retracted or discontinued the skirt circumferentially in the region of the bosses, so as to avoid completely any skirt interference with the desirable axial expansion of the bosses.

this feature, directly or by inference, thereby making the amended claims in this respect broader than the original or the issued claims; and he *necessarily* thus omitted this feature because these claims were by the interference declarations made of such broad scope that they applied to the forms of Hartog, (Spillman and Long),[4] whose respective devices *did not contain* this feature.

This construction, under the name of "relief," was a feature of the Maynard patent and of the infringing device Exhibit 1 made by the Sterling Company. Indeed, the briefs on both sides in the first *certiorari* assumed or claimed that the piston could not be commercially operative without this relief. Long's pistons without this relief were not satisfactory. So too the Sterling Company, after unsuccessful efforts, was compelled to embody in Exhibit 1 this feature, "relief," before it could make a successful piston; and that because its relief was of keystone shape instead of rectangular, it did not infringe, was the burden of defendants' brief.

To reach its conclusion this Court now must consider immaterial this distinction between allowed claim 8 and cancelled claim 19E, whereby one claim was limited by this call and the other was not. It was not so considered by the Patent Office, or by the various contesting applicants, or by the industry. The contention of such immateriality was not made before the Master or the District Court or the Court of Appeals on the first or second hearing or by the petitioners' brief here, and is not supported by any evidence in the record. The distinction pertains to unseen and unseeable operation, involving tremendous forces and incomprehensible speed, where a variation of 1/1000th of an inch determines success or failure. We most respectfully, but most earnestly, submit that on such a point

---

[4] The Spillman and Long applications defendant did not put into the record. We are showing them in our accompanying motion. Therefore we hereafter refer to them in parentheses.

no court possesses the judicial knowledge enabling it to speak *ex cathedra*.

It is of special interest to note that the amended claim which the Court has selected [18] 19E was one of those proposed by the Patent Office to Jardine as one of the issues in the expected interference, which included Hartog, (Long and Spillman, whose interfering applications did not result in patents of record here); but this claim or issue was thus declared to be appropriate to and proper to read upon these other three forms. The record does not show from which original application it was copied or whether it was formulated *ex parte* by the office, but it cannot now be given by the Court any construction which would leave it inapplicable also to each one of these four. Upon the present record[5] we can compare only with Hartog; but even that will be sufficient.

It is further interesting to note that this 19E was the claim which, with claim 22E, became the two counts of Interference No. 49578, and that the Patent Office thus declared that the two counts or claims were distinct from each other, indicating different structures, and each independently calling for its own separate date of conception and reduction to practice and each supportable by distinct proofs. In observing the distinctions between amended claims 19E and 22E, which thus (like all the other cancelled claims) were declared to be distinct inventions, the Court will see that 19E is relatively limited in several particulars while claim 22E is very broad, calling only for any kind of "means" for the yielding connection, and the Court will notice that one of the distinctions is that 19E calls for "skirt carriers * * * susceptible of being slightly flexed radially." This was language appropriate to Hartog (and probably to Long and Spillman), in which the skirt carriers were integral extensions in the continuous curve of the

---

[5] And without reference to our motion.

skirt and in which the flexing of these bow-like carriers was exactly radial when pressure was exerted upon the cold skirt to compress it and insert it into the cold cylinder; while this language is not applicable at all to the Jardine allowed claim 8, as plaintiff thinks it should be now interpreted, because the flexing of Jardine's webs is not radial of the skirt and cylinder but is rather circumferential, or possibly tangential,—or if the flexing takes effect longitudinally of the web, then its direction is chordal of the skirt. The Court cannot say that this difference is immaterial. A radial compression might make the combination successful or unsuccessful; a tangential yielding, as upon a hinge, or the cantilever principle, might make the combination successful or unsuccessful. The Court cannot judicially know, and the record does not tell us, except as the Jardine form was successful and the Hartog form, so far as the record shows, was neither used nor feasible.

Certainly it has never been thought that when a claim was rejected because, in its greatly extended and broad meaning, a contestant was the prior inventor, the applicant's acquiescence in that rejection has any effect upon the construction which should be given to his allowed claims which are confined to specific features which his specification and drawings *did* show, but which the contestant did not have.

Coming back to the same paragraph on page 9, the Court further finds identity between claim 8 (if the webs be flexible) and cancelled claim [18] 19E, because the latter embraces[6] "flexing webs supporting 'retracted bosses.'" The cancelled claim does not specify "flexing webs" or any other kind of webs. It calls for "skirt carriers." That is, any kind of a carrier, whether an independent web as shown by Jardine, or mere extension of the continuous skirt without any distinctive web, as shown by Hartog,—or posts,

[6] "Embrace" is a word of *broader scope,* employing inclusion; it does not appropriately indicate a limitation.

arms, or ribs shown by the other interferants. Nor is it true that the cancelled claim calls for webs "supporting retracted bosses," or any other kind of bosses. If we interpret by an application to Hartog, the skirt carriers were connected to the pressure receiving end by springing from a flange or rib depending from the head, and this flange or rib (not the skirt carriers) supported the bosses (see Fig. 1, p. 727); while, if we are not taught by the Hartog comparison, the phrase "skirt carriers connecting said webs to the pressure receiving end" is of the broadest possible character as to this element, and seems to cover any conceivable form of supporting connection (as in Long and Spillman).

We further notice that "retracted bosses" are not, under any nomenclature, a feature of the cancelled claim, and are not a feature of the allowed claim,—when the distinction is observed between retracted bosses and skirt retraction pointed out above (p. 7). The court below, in its opinion upon the Jardine patent, recognized that while Jardine had the general conception formerly attributed to Gulick he had it "with modifications which may improve but do not destroy it." One of these modifications which did improve Gulick was the substitution of the non-continuance or "retraction" of the skirt over the region of the bosses, thereby uncovering the web and the bosses, which feature Gulick *did not have* and Hartog (Long and Spillman) *did not have* and the cancelled claim *did not have* but the allowed claim *did have*.

It is of course true that neither amended nor allowed claims specified in words, as an element, the resulting balanced skirt flexibility, which in fact did exist in, and which was due to the cooperation of the parts in, the *allowed* claim, but did not exist by the cooperation of the parts specified in the *cancelled* claim (properly interpreted by its application to Hartog (Long and Spillman)). The court below pointed out that the operation of Hartog could not be

well ascertained from specification and drawing (R. p. 924); and at any rate there is no testimony that the cooperation of the parts named in the cancelled claim would or could produce the result which did follow from the cooperation of the parts of the allowed claim,—the vital minute clearance. Hartog neither had nor solved any problem of thermal expansion, and hence the amended claim, applicable to and met by Hartog, gave no solution by a "flexibility" "balanced" to meet that problem. Hartog presented only a skirt having *tensional* flexibility, having the functions of, and proposed as a substitute for, the ordinary packing rings (See R. p. 729, 2nd col.). The cancelled claim therefore embraced even a resilient spring tensional flexibility.

With still further reference to the same paragraph, it is not seen how one can be aided in determining the identity of two claims by observing that both of them omit certain features. Both of these claims might have been extended by including a number of other cooperating elements like the cylinder and the piston pin and the connecting rod, but such common omission of a subtrahend does not tend to prove the identity of the two remainders. Such a conclusion is a *non sequitur*; the witnesses who did not see an act usually outnumber those who did.

The only other portion of the opinion in which the Court compared the abandoned and the allowed claims is in the first full paragraph of page 7. In stating the similarity, it said "both are combination claims" for a piston having a head and a skirt "connected with the head by ribs, webs or skirt carriers." This statement might seem to infer that the phrase "ribs, webs or skirt carriers" appeared in both claims, but of course it is not so intended. The connecting means is described by Jardine's specification and allowed claim 8 as "webs." Such means is described in claims 20E, 21E and 22E in apparently the broadest possible terms as "joining means" which are "resiliently yieldable." It is

described in claim 16E, in language of a bit less breadth, as "internal yielding ribs." It is described in 18E as "downwardly extending resilient arms." In 19E it is described as "skirt carriers * * * susceptible of being slightly flexed radially." The declarations of interference assumed that Jardine's "web" was one specific kind of the "yielding means," etc., of the (Long, Spillman or) Hartog claims; they did not assume that all "yielding means" of all these other forms, were "webs." No one of these cancelled claims calls for a "web," flexible or non-flexible. A web as described by Jardine is a flat, thin plate of metal extending, approximately at right angles to, and in opposite directions from, its supporting pier or member, out to the skirt, and, with its complementary web on the other side of the piston pin, bearing a double chordal relation to the skirt circumference. This term, thus defined, applied accurately to Jardine. It is clear that all of the other applicants who were put into interference, and whose claims Jardine copied as a required preliminary to the interference, were attempting to get a monopoly in this respect in some much broader terms,—*all* "yielding ribs," *all* "resilient arms," *all* "carriers slightly flexible." That these many claims were put into interference, while Jardine's then existing allowed claims calling for webs (R. pp. 756, 769, 774) were not put into interference, is demonstration, if demonstration were necessary, that the Patent Office regarded webs as one thing, with one distinct and limited meaning, and regarded "yielding means," "yielding ribs," etc., as broader and, therefore, different descriptions for the connecting means and therefore as expressing different things. In short, the Patent Office proposed these various expressions in these various claims as marking differentiation from the webs found in Jardine's then existing allowed claims not put into interference and in his ultimately allowed claims; all parties acquiesced in the Patent Office finding that these words marked and *declared differentiation* between the claims;

but now the Court finds that these differing words mark and *declare identity* between the claims.

Coming now to the second paragraph on page 7, the opinion says that Jardine did not, during his correspondence with the Patent Office of his application, "urge that he was the inventor of a piston having flexible webs." True enough, so far as express words go; but why should he? He had most elaborately described and shown in his specification that his invention did pertain to a flexible web, and had particularly described different forms in which it might bend. He was making claims which involved as elements the webs which he had described, and he was presumed to know, as this Court has decided might be assumed to be the law, that his claim would be interpreted as limited to the web described or its substantial equivalent. The rightful negative inference to be drawn from the prosecution of his application is that Jardine "did not at any time in file wrapper letters urge that he was the inventor of *all and every* flexible means for joining head and skirt section." During the interferences on these broad claims, he contended that he was such broad inventor, after the decision against him, he did not.

The opinion in this same paragraph says also that Jardine urged as his only advance over Ricardo the addition of a slotted skirt "which changes the structure and the resistance to a disposal of the forces within and without the piston when the piston is in use." Yes; but in the next sentence (R. p. 775) Jardine urges that "pressures operating on the piston will operate in different directions and must be met and handled in such a way as to realize the advantages sought for." As interpreted by the specification, this "urging" by Jardine meant that the pressures operating in different directions would create a tendency to close the slot, which tendency was accommodated by the bending of the webs, and that the stated flexibility of the

webs permitted the conflicting expanding and compressive forces to be "met and handled in such a way as to realize the advantages" described in the specification. That is our position today.

It is true, as further stated in this same paragraph of the opinion, and as was the custom in the Patent Office, that after the interferences were terminated, the applicant revised and rewrote his claims in the light of the interferences and their result. Jardine then knew that he must confine his claims to the webs which he had shown and described; and he did so. Claim 1 as issued (then 8, R. p. 769) stood allowed (R. p. 774) and, in submitting this final amendment, Jardine had no occasion to comment on claim 1. It has been sustained by the court below, and it is sufficient to support that court's decree. In his comment Jardine did say as to issued claim 8 (then 28, R. p. 839) that it was "similar to claim 3 but recites in addition that the webs are integral with the ring flange." This reference to the integrality of the webs with the flange was not to distinguish from the interference issue or the prior art or to characterize the invention of this claim, but to distinguish from the then allowed claim 3. The comment on issued claim 11 (then claim 31) not only refers to the webs as the opinion says it does, but goes on to specify that the webs "have substantially all of their outer sides exposed."[7] Throughout these final comments Jardine assumes, as was the fact, that he and the Patent Office were in accord as to the invention to which he was entitled, and he was only pointing out the distinction between his various claims to show that there was no duplication.

Coming back to the paragraph on page 9 of the opinion, it concludes with the statement that the only difference between the amended and the allowed claims is that the

[7] In substantial distinction from every one of the cancelled claims which touched "flexibility."

former contained, while the latter did not, a specification of the flexible web feature. We have already pointed out that amended claim 19E was like the other amended claims in that no one of them pointed out or referred to the "flexible web" feature. No one of them, in attributing to some feature the ultimate character of the combination when operating under conditions of expansion and compression, attributed this characteristic to a "web," as that element was described in the Jardine specification, which had adopted this nomenclature. Each of these claims used a much broader term, which was generic enough to include webs and many other forms. In some possibly generic sense the webs of the allowed claim were "yielding ribs," "resilient arms," "joining means resiliently yieldable" or "means for yieldingly connecting the said skirt section with the head"; but that these generic terms should be considered as completely co-extensive with and therefore equivalent to the specific form of "yielding means" which Jardine had described and distinctively denominated a "web" is, we respectfully insist, a view of claim equivalency which has no precedent in the decisions of the Patent Office or of the courts.

II. Claim Breadth and Construction.

By the settled rule of familiar application, the cancellation of broader claims prevents giving to an issued narrower claim a construction which will make it equivalent to the cancelled claim, as the court says on page 8 of the opinion. To make the principle of this rule applicable to the present case, the court thought it necessary to declare, or assume, that the claims abandoned were narrower, and the claims allowed were respectively broader; and this assumption plainly lies at the base of the court's reasoning, and unless it is sound, the result reached by the opinion is not defensible.

This involves the broad question of the accepted patent office definition of these terms, "narrow" and "broad,"—by which definition all parties are bound, since that definition and understanding must have characterized the action of the patent office and the parties in making, as well as in cancelling, claims. As is pointed out in the pedagogical and very elementary discussion in *Scaife v. Fall City*, 209 Fed. 210, to which the court referred in its opinion, there can be no inevitable and definite differentiation by using these terms. Oftentimes the distinction is clear. Sometimes it cannot be clearly made. The most common criterion is found in the number of elements, or the omission or inclusion of an element; but more frequently it may be found in the broader or the narrower specification of the same element found in both claims. For the purpose of this conclusion no careful comparison can be made unless the claims, which finally speak as a composite whole, are analyzed into their elements and then compared.[8] In making this comparison, and to get the same point of view held by the court, we must necessarily assume that the "web" of the allowed claim was the flexible web which it becomes by plaintiffs' construction. Therefore, we occasionally insert in parentheses the word "flexible."

Specifying these elements in the allowed claim 8 we find:

1. A head
    (1-a) Having a cylindrical flange,
        (1-a-x) for the piston rings.
2. Webs
    (2-a) (flexible)
    (2-b) Oppositely disposed.
    (2-c) *Integral with the flange.*
    (2-d) *Carrying the piston pin bosses.*

---

[8] Such a comparison is necessarily tedious and we hesitate so to tax the patience of the Ccurt; but, if given careful thought, it will determine whether the opinion of the court in this respect was right or wrong.

3. A skirt
   - (3-a) Integral with the webs.
   - (3-b) *Cut away over the webs* (and therefore over the bosses).

4. Circumferential slits
   - (4-a) Between the ring flange and the skirt.

5. A longitudinal slit
   - (5-a) *Between the ends of the webs.*

6. Bosses, carried by the webs.

Now comparing this with the cancelled claim 19E (and indicating such similarity as there is by the same number) we find:

1. A head
   - (1-a) Of cuplike form comprising a pressure receiving end and a wall portion.

2. No such element, but there are "skirt carriers," which do not meet (2c) and (2d) above, and which are distinctly defined as
   - (a) Connecting the skirt to the head.
   - (b) Slightly flexible
   - (b-x) radially.

3. A skirt,—which does not meet (3b) above, and which is distinctively defined by qualifications hereafter pointed out.

4. The corresponding element is tied to and modified by a different "disconnection"—see (3x) *infra*, p. 21.

5. No corresponding element.

6. No corresponding element.

Now comparing these, element for element:

(1) *Head and head.*—The mere limitations as to form, differently expressed, may not indicate any substantial difference (though, interpreted by their respective sources such difference might develop); but the ring flange, specified by the allowed claim, was the flange for carrying the

usual packing rings (p. 1 Jardine patent, lines 52, 53), while Hartog (and Long and Spillman), which, because the Patent Office applied 19E to it, must serve as the lexicon of 19E, has no packing rings at all, and therefore no ring flange. The Patent Office declared the difference, awarding to Jardine by the allowed claim the head which, while generally "cup shape," was limited to the form having grooves for rings, and gave to Hartog by 19E the broader form, in that the "ring" limitation was omitted. In this respect the cancelled claim was broader. The Patent Office thought the difference was substantial. There is no evidence that it was not substantial, and the court cannot judicially know.

(2) *Webs and skirt carriers.*—The differences are obvious. The web of the allowed claim was Jardine's form of the device which carried the bosses which in turn carried the skirt sections; the "skirt carriers" of the cancelled claim referred in a much broader way to any structure which performed this carrying function and, particularly, must have been intended to extend to and cover (Long and Spillman as well as) the Hartog structure,—an anomalous form which neither Hartog nor the Patent Office, nor anybody else ever called a web, but which can be well described only by the broad functional term "skirt carrier." Here again the cancelled claim is broader, the Patent Office thought the distinction material, and there is no evidence to justify holding it immaterial.

Another difference is this,—the allowed claim requires that the webs shall be integral with the ring flange and, therefore, integral with the head. The cancelled claim contains no such limitation as to the structure of the "skirt carriers," but only that they shall be in some way,—in any way,—*connected* to the head; and in fact, interpreted by an application to Hartog (as well as Long and Spillman) they are connected to and carried by differing forms, Hartog's being a vertical rib depending from near the center of the head. (Fig. 1, R. p. 727.) Obviously in this respect

the cancelled claim is broader than the one allowed. The record does not show, and the court cannot know, that this difference is, in operation, of no consequence. In fact these connections have also the function of heat transference and dissipation.

There is yet another difference. By the allowed claim it is required that the bosses shall be carried by this (flexible) web. By the old trunk style, the bosses were carried by the skirt itself. The method of carrying specified in the allowed claim permits the bosses in their axial expansion to take the benefit of this flexibility. In the cancelled claim there is no limitation as to how the bosses are to be carried. In fact the bosses are not mentioned at all, and if, in spite of this omission, the claim can be made over into an operative combination by implying that there must be some bosses somewhere, there is certainly no limitation as to how or where they should be carried. Again interpreting by an application to Hartog (and Long and Spillman) the cancelled claim contemplates differing forms, Hartog's being a rib or arm descending from the center of the head, which apparently rigid arm carries the bosses, and also supports Hartog's skirt carriers. Again it is clear that the cancelled claim is in this respect broader than the allowed claim, and the record does not show, and the court cannot know, that this difference was inconsequential under operating conditions.

There is a still further difference that, in the allowed claim, the contemplated flexing of the webs is tangential or chordal of the skirt sections and contemplates circumferential adjustment of the skirt sections, while in the cancelled claim the contemplated carrier flexibility extends to that which is radial of the skirt permitting radial adjustment of the skirt itself. Which of the two claims is broader in this respect it is impossible to say. Each is limited to a distinct type of flexibility; but we cannot presume,—and there is no evidence to show,—that the distinction meant nothing.

(3) *Skirt and skirt.*—The first difference is that by the allowed claim the skirt must be integral with the webs and therefore with the head (ring flange), thus receiving from the head the heat which expands the skirt, while by the cancelled claim there need be only some or any kind of connection. Evidently the cancelled claim is broader in this respect. The Patent Office thought this difference material, there is no evidence to the contrary, and we cannot presume the contrary.

The next difference is that in the allowed claim it is specified that the skirt must be retracted from or cut away over the bosses; in the cancelled claim there is no such restriction, and it cannot be implied, for then it would not read upon Hartog, and (as we believe) the other interferants to whom the Patent Office applied it by declaring the interference.[9] The importance of this distinction is pointed out *supra*, pp. 7-8. The cancelled claim is obviously broader in this respect.

The remaining differences which exist between the particular skirt of the allowed claim and the contemplated skirt of the cancelled claim are developed from the cancelled claims skirt limitations found in the following items (3x) and (3y).

(3x) The allowed claim calls for two circumferential slits, each one separating the ring flange (head) from the adjacent skirt section; the cancelled claim also calls for any kind of "disconnection," however wide or of whatever shape, between the skirt *carrier* (web?) and the wall portion of the *head*. These are different constructions, and the "slit" and this second "disconnection" are in different locations, with different uses. Whatever the proper interpretation of these different phrases may be, the language of the cancelled claim would cover a variety of possible con-

[9] The forms of Long and Spillman are not shown by the present record, as discussed in the motion filed herewith; but the impossibility of reading it upon Hartog is test enough.

structions, "disconnections," which would not be reached by the language of the allowed claim, "slits." The record does not show, and the court cannot know, that this difference would be insubstantial in operation.

(3y) The allowed claim specifies that the longitudinal slit in the skirt shall be *between the ends of the webs.* Applying this language to the Jardine construction, the ends of the webs are clearly the outer ends where they join the skirt sections and the slit therefore must be in that part of the skirt opposite the piston pin and at right angles thereto,—the horizontal sides on Figures 4, 5, 8 and 9 of Jardine; the cancelled claim calls only for any kind of "division of the skirt from end to end." The substantial, and indeed vital, distinction is that the longitudinal or vertical slot thus located in the allowed claim is thereby put in or near the center of the thrust face of the piston; while the "end to end (vertical) division" of the cancelled claim may be *anywhere* in the skirt circumference, and therefore it need not be in the center of the thrust face or in the thrust face at all. In fact, interpreting the cancelled claim again by its application to Hartog, its language was intended to refer to the space, if there was any after insertion in the cylinder, between the extreme edge of one skirt section, remote from its carrier, and the radial end of the carrier of the other section, and this division was not in the thrust face at all.[10] It happens to be familiar to counsel upon both sides, through development in other litigation, and indeed it appears from the record in this case regarding Maynard, that this slot, to be most useful, should be in the center of the thrust face, and that when much removed therefrom it ceases to be relatively useful, or useful at all; but at any rate there is no testimony showing that this difference in the location of the slot is insubstantial

---

[10] The thrust face of Hartog, looking at Figure 4, is that portion on and immediately adjacent to a horizontal line through the center of the figure. (R. p. 727.)

in operation, and the court cannot say that it is. Obviously, also, the broad language of the cancelled claim,—a vertical "division" located anywhere in the circumference,—is much broader in this respect than the allowed claim, which located the slot at that particular point in the circumference where only it becomes useful.

If now we leave the specific comparison and turn to the comment of the court on page 9 which said that the "retraction of the skirt from the bosses" and "balanced skirt flexibility" could be construed into the cancelled claim by reference to specifications and drawings, we see by reference to *Spillman and Long,* whose constructions appear by our accompanying motion, that these two elements are not disclosed by Spillman or Long so that to read these limitations into claim 19E would be to give this claim an interpretation not given to it by the Patent Office, by Jardine, or by any other party to the interference when it was suggested, made, prosecuted or cancelled. It was the claim without these limitations in it that was abandoned and cancelled. Hence, when the court in effect said that it was the claim as thus limited which was cancelled, it is quite clear that the statement could not have been correct. If the cancelled claim by virtue of any proceedings of the Patent Office and the acquiescence of the parties therein was to be given any construction except the one apparent on its face, it was the duty of the defendant to show such Patent Office construction. The defendant did not do this and thereby misled the court. In fact the Patent Office proceedings in this record, and additionally, when supplemented by our motion, show the contrary.

In summary: Whether this comparison is made carefully and in detail as above set out, or whether it is made more broadly by observing only what are perhaps the most outstanding differences,—(1) the absence from the cancelled claim of any reference to the bosses, and much less of any limitation as to where and how they should be carried,

(2) the absence from the cancelled claim of the limitation that the skirt shall not extend over the region of the bosses, (3) the flat contradiction between the allowed claim limitation that the web (skirt carrier) shall be "*integral with*" the ring flange (wall portion of the head) and the cancelled claim limitation that the skirt carrier (web) shall be "*disconnected from*" the wall portion of the head (ring flange), and (4) the absence from the cancelled claim of any limitation that the longitudinal slot shall be in the thrust face,—in either case we earnestly submit that it is quite as impossible to say that the allowed claim and the cancelled claim are (except for web flexibility) substantially equivalent, as it is impossible to say that the former is broader than the latter.

It is an inflexible rule in the Patent Office that a count to an interference will be given the broadest construction that its language will bear.

This rule is stated by the Court of Appeals of the District of Columbia in *Hewlett v. Steinberger*, 1913 Commissioner's Decisions, page 372, as follows:

> "We fully agree with the finding of the Commissioner that the corrugations of Steinberger, being properly positioned, perform and were intended to perform substantially the same function of the so-called 'flanges' and 'collars' of the issue. The terms are therefore synonymous, as used in this record. *This conclusion recognizes the rule that claims should be given the broadest interpretation consistent with the terms.* (*Lindmark v. Hodgkinson*, C. D., 1908, 540; 137 O. G., 223; 31 App. D. C., 612; *Viele v. Cummings*, C. D., 1908, 362; 134 O. G., 777; 30 App. D. C., 455; *Miel v. Young*, C. D., 1907, 561; 128 O. G., 2532; 29 App. D. C., 481.)" (Emphasis ours.)

The rule has been followed for years, was followed during the Jardine interferences, and is still followed.

This rule was applied in interpreting claim 18 (19E) in the Patent Office and, of course, under this interpretation did not include features (a) "retraction of the skirt from the bosses" and (b) "balanced skirt flexibility." When this Court construed features (a) and (b) into claim 18 (19E) it made something that had not been before the Patent Office, had not been in the Jardine application, had not been made by Jardine and had not been cancelled or abandoned by Jardine.

III. The Converse Estoppel.

On page 8 of the opinion the court expresses wonder, as did the court in the *Morgan Envelope* case, why the Patent Office allowed the broad claim after rejecting the narrower one. This wonder is not strange. The short answer is that the Patent Office did not do so, either in this case or in the *Morgan Envelope* case.

It is conceivable that the Patent Office would grant a broad claim and refuse a narrow one in the same application because it thought the narrow one involved no inventive improvement or distinction over the generic claim; but that did not happen in this case nor in the *Morgan Envelope* case. Jardine had devised one specific form, and Hartog (as well as each other interferant) had devised another specific form, all of which forms the Patent Office thought could be included within some generic phrase. If so, it was elementary that the generic claim should go to the first inventor while the later inventor could have only the specific form. Accordingly and resulting from this underlying rule, the interference was declared, to see who was the first inventor. Although the dates were close, it was decided that Hartog was first (as between him and Jardine) and so he became part of the prior art as against Jardine. This decision made it imperative that Hartog should have the broad claim and Jardine the narrow one. One who invents a specific form, generically new, thereby

becomes and is entitled to a generic claim,—even though at the time he may not know it. The Patent Office tribunals could not be more shocked than to be told that they had decided the issue of priority in favor of Hartog, and had awarded the broad claim to Jardine.

This consideration only confirms the conclusion which has already been necessarily reached by comparison of the allowed with the cancelled claims.

Whether the rule as to the estoppel coming from abandoning a broad and accepting a narrower claim can rightly be always extended to the converse situation, is an interesting legal question which does not seem to us now controlling. However, in Appendix B we consider the *dictum* found in the *Morgan Envelope* case and whether it should be adopted and followed.

The other cases cited in the second paragraph of page 8, do not support this "converse" proposition. In no one of them is it involved, discussed or decided.

IV. Claims as a Composite Unit.

The opinion in the last paragraph on page 8 takes note of our insistence that when claims are to be compared to develop similarity or differences we must compare not the relative modifications of specific elements, but the combination as a whole as a composite unit; and, while perhaps assuming this general rule to be correct the opinion proceeds to treat the summary comment of the court below in its opinion as though that court had intended to rewrite the claim, and then this Court considers this summary comment as though it were the claim in suit. The court below had no intention to rewrite the claim. It said (R. p. 924) that its conclusion of the validity of the claims sued upon

> "is based upon the concept of a combination with balanced skirt flexibility due to cooperation of longitud-

inal[11] [circumferential] and vertical slotting with flexing webs supporting retracted bosses and connected to a skirt thereby made responsive to physical pressure and thermal expansion so as to permit of minute clearances between piston and cylinder."

Clearly, that court was not intending to modify or disparage any of the elements of the claim in suit; it was stating operation and results. A claim in this language would have been promptly rejected by the Patent Office as being functional,—such claims are not permitted.

It is not conceivable that an experienced court, thus stating the operation and result of a combination claim, due to the coaction of elements which it recites in general terms, would intend to say that there would be the suggested cooperation between *any kind* of longitudinal [circumferential] slotting wherever it might happen to be located and whether operative or not, and *any kind* of vertical slotting wherever located and whether operative or not, or *any kind* of flexing webs whatever the shape or location, or *any kind* of retracted bosses no matter how carried and how operating, or *any kind* of a skirt however complete or however sectional.[12] The court most certainly had reference to the circumferential slotting described and shown by Jardine, and to vertical slotting operating as described and shown by Jardine, and to flexing webs operating as described and shown by Jardine, and to bosses retracted and supported and operating as shown by Jardine, and to a skirt cut away so as to operate as shown by Jardine and which was connected to the bosses with the effect described and shown by Jardine. The concept thus stated by the court was such as brought the final result,—permitting the minute essential clearances between piston and cyl-

---

[11] Through some typographic or clerical error at some stage in the proceeding this word "longitudinal" has been accidentally substituted for "circumferential."

[12] To use Justice Holmes' familiar phrase, that court was not speaking "*in vacuo.*"

inder. There is no evidence to the effect that, and the court below could not presume, and this Court cannot presume, that this result of minute clearances could be brought about by using any other type[13] of circumferential slotting or any other type of vertical slotting or any other type of flexing means or any bosses otherwise connected or supported, or any other type of skirt, or any other type of connections, than those operating as described by Jardine, and every one of which is embodied by appropriate limitations (express or implied) in the allowed claims upon which suit is brought. If the skirt were not cut away from the bosses to permit unrestricted boss axial expansion, or if the bosses were not carried by the flexible webs so as to cooperate in this expansion, or if the webs were not integrally connected to the ring flange so as to permit the contemplated heat conduction, or if the vertical slot were not located in the thrust face,—all as the allowed claim specifies and as the cancelled claim does not,—the first result, "balanced skirt flexibility" and the ultimate result, "minute clearance," would not be achieved,—at least, there is no evidence whatever that they would be, and the verdict of the industry is to the contrary.

The result is, as we respectfully submit, that instead of giving due effect to the rule that identity or difference in claims depends upon consideration of the complete claims, as composite units, rather than upon this or that difference between the respective details of corresponding elements, the court has rewritten Jardine's cancelled claims (*e.g.*, 19E) so as to narrow them to include specific unnamed limitations, and having so rewritten them to make them narrower and more specific, the court then finds them equivalent to the similarly specific claims which Jardine retained and which were allowed. *Of course,*—no reasonably specific claim could survive such method of treatment.

---

[13] By "type" we mean the form shown and such equivalency as the specification and the state of the art indicated including the accused piston Ex. 1.

The statement in a rehearing application, that the opinion of the court will have a revolutionary effect upon some rule of law or some established procedure, is probably so familiar to this Court as to be trite; yet we must urge that for this Court to say that claims 8 and 19E are equivalent (except for web flexibility), or to say that 8 is broader than 19E, is to disregard and thus invalidate the theories of claim distinction and claim breadth that have prevailed in the Patent Office and in the patent courts longer than any of us can remember. The court surely did not intend to do that.

V. Other Errors in the Opinion.

We call attention to these, not because they are necessarily controlling but because we think the Court, on reflection, may wish to make some change.

1. In its former opinion the Court took as its text from which to discuss the Gulick patent, claim 39, which it quoted at length and to which it applied its reasoning. This was confusing, because claim 39 was not in suit and had never been considered, much less sustained, by the court below. In our subsequent memoranda suggesting changes, if not rehearing, we called attention to this error, but the Court made no response. Now, in the present opinion, in reciting the former proceedings, the Court repeats this same error.

2. On page 6 of the opinion, after reciting claim 8, the court says "claims 5 and 6 refer to the 'skirt portion cut away from the head to expose the bosses.'" The first thought would be that the court intended to refer to the two other claims which were in suit, 1 and 11, in which case the reference is accurate and effective. If it were possibly intended only to emphasize the persistence in the claims of this limitation, a complete statement would have been that it is found in each of the twelve issued claims except No. 10, either in these express words, or by saying that the skirt merges into the webs,—so that it could not separately continue overlying the webs.

3. The recital in the last paragraph of page 3 would seem to the casual reader to import that the court below, after it had held the Jardine patent invalid and directed the bill to be dismissed, found in the first opinion of this Court occasion or excuse for recalling its mandate and reaching a contrary result. Doubtless this Court did not intend its recital to be so construed or to imply any disparagement; but a complete recital would have left no room for misunderstanding. It would have shown that on the first hearing the court below sustained the Gulick and Maynard patents and, as to the Jardine patent, declined to pass upon its validity or infringement, because those subjects had become immaterial after the broader patents were sustained, and so it ordered that the District Court should dismiss the bill as to Jardine *without prejudice*; that it withheld its mandate pending certiorari proceedings in this Court; that in February, 1938 this Court denied defendants' petition for certiorari; that in March, 1938 this Court denied defendants' request for rehearing of such petition; that this result was certified to the court below and thereupon. in March, 1938 that court issued its mandate to the District Court directing the dismissal of Jardine *without prejudice,* because that patent had not been considered; that the decree of the District Court was entered accordingly pursuant to this mandate; that in June, 1938 this Court granted the defendants' petition for leave to file a second petition for rehearing and granted the rehearing and granted the writ,—although no reason was advanced by petitioner except those which (though in other words) had been twice before presented and overruled; that upon the hearing this Court expressly directed the court below to reconsider the Jardine patent and pass upon its validity; that the court below expressly followed the

direction of this Court and recalled its mandate only because the order of this Court had made that recall necessary.

All of which is respectfully submitted.

ARTHUR C. DENISON,
FRANK O. RICHEY,
WM. C. McCOY,
MILTON TIBBETTS,
Counsel for Respondents.

January 3, 1941.

We hereby certify that the foregoing petition for rehearing is presented in good faith and not for delay.

ARTHUR C. DENISON,
F. O. RICHEY,
WM. C. McCOY,
MILTON TIBBETTS,
Counsel and Solicitors for Respondents.

APPENDIX A.

HISTORY OF THE PETITIONERS' (DEFENDANTS') ATTACKS UPON THE JARDINE PATENT, AS COMPARED WITH THE BASIC PROPOSITIONS OF THE COURT'S OPINION.

So far as we can find, the two propositions stated, *supra*, p. 3, never were raised at any time by defendant. The suggestion, or the contention, that the Jardine claims in suit, 1, 8 and 11, ought not to be construed in the normal way, by the specification, but rather by comparison with abandoned and cancelled claims, was never made before the Master nor mentioned by him in his elaborate report. It was not made in the briefs and arguments before the District Judge, nor mentioned by him in his memorandum. It was not made by defendants' briefs before the Circuit Court of Appeals in the first hearing nor mentioned by that court in its first opinion. It was not made in the defendants' first brief before the Court of Appeals upon the second hearing. It was first made in defendants' supplemental brief upon the second hearing, summarized in a five line paragraph quoted in the margin,* and which plainly assumed that because broad claims had been lost by interference, the allowed claims could not be given the broad construction plaintiff claimed; it raised a question of infringement, not of validity. This brief then, in its references to the "relief" or the "skirt retraction" found in claims 1, 8 and 11, takes for granted the materiality of this differentiation between the allowed and the abandoned, but contends only that it did not distinguish from the prior Long public use. There was no suggestion that it did not materially distinguish from the Hartog construction, which was one of the forms covered in amended claim 19E (or Spillman and Long). The brief then says (p. 53) that be-

---

* "2. Jardine lost in interferences with both Long and Hartog, and therefore cannot claim any construction, either by application of the rule of equivalents or otherwise, sufficiently broad to cover any of the pistons before this court." (p. 44.)

cause "web flexibility" had been conceded to Long and Hartog in the interferences, the claims in suit must be narrowly construed as restricted to details which were non-inventive or not infringed.

To this the present respondents (then plaintiffs) replied (p. 16 Reply to Supp. Br.) that file wrapper estoppel did not extend to invalidate claims which had been allowed because they differed from claims which had been rejected; that these rejected claims had been rejected on prior art and were cancelled; that the claims now in the patent and sued upon were allowed because they differed from the prior art, while the cancelled claims did not so differ; and concluded "we do not here seek a construction of the patented claims co-extensive with the rejected and cancelled claims."

Since it had not been even suggested to the Court of Appeals upon the second hearing that the claims sued upon (with plaintiffs' construction) were substantially identical with cancelled claims, and since the rule, that the cancellation of a broader claim did not prevent giving the proper interpretation to the retained and allowed narrower claim, covered the situation so obviously and completely, the Court of Appeals very naturally did not mention the subject in its second opinion.

In the (then) defendants' petition for rehearing, the subject was not mentioned. In the petition for certiorari and the accompanying brief, it was contended (pp. 4 and 5) that because Jardine had surrendered the claims which were in the interferences and which (it is erroneously said) "included flexing webs," the claims in suit could not be interpreted by the specification to call for flexing webs. Nowhere in the original petition and brief or in the petitioners' main brief in this Court was it said that the allowed claims were substantially equivalent to the cancelled claims (except for web flexibility); but the defendants' contention was that because in some abandoned claim, though generally

very much broader than and plainly nonequivalent to the allowed claim, there had been mention of a particular quality (flexibility), that particular quality could not thereafter be regarded as characteristic of an element in the allowed combination claim, even though the specification so directed.

Since petitioners' brief had not alleged substantial identity (except for web flexibility) between rejected claims and allowed claims, and had not contended that the allowed claims, as claims, were broader than those cancelled, our brief did not discuss either idea, but insisted (p. 44) that the claims which were abandoned were much broader than those allowed (as indeed petitioners had admitted) and, therefore, the abandonment of the broader claim did not prevent the proper construction of the allowed narrower claim; and petitioners' reply brief did not suggest that the claims allowed were, as combinations, broader than the abandoned claims, nor set up any specific comparison to support the contention that the claims abandoned and the claims allowed were (except for web flexibility) substantially identical.

Our recollection of the oral argument is that we pointed out that the claims lost in interference were much broader than the claims allowed and, therefore, could not result in forbidding any reasonable specific construction of the claim allowed, while petitioners urged only that the inclusion in the abandoned claim of one limiting adjectival word in describing one element, no matter what the remainder of the claim was or how broad it was, prevented considering that element in the different allowed claim as properly subject to the same limitation, though that limitation would otherwise be properly implied from the specification.

From this review it appears that we are justified in the statement on p. 3 that we have never had the proper opportunity and occasion to be heard upon these two propositions.

APPENDIX B.

THE MORGAN ENVELOPE CASE.

On page 8 of the opinion this Court refers to *Morgan Envelope Co. v. Albany Paper Co.*, 152 U. S., 425, 429. The Supreme Court, after stating the general proposition that one who has abandoned the broader claim and accepted a narrower cannot thereafter extend the narrower by construction so as to be equivalent to the broader, added "that the principle is the same if the rejected claim be narrower." We are here concerned only with this later and corollary conclusion, upon which this Court now rests its opinion. Examination of the *Morgan Envelope* case makes clear that this corollary was a *dictum* not called for by, nor based upon, the facts of the case. The article involved was a roll of toilet paper. It was made upon the forming roll which so became its interior diameter, and its outer diameter was determined by the thickness of the paper in its windings. The original claim called for a roll of oval form and made no mention of any limiting relationship between interior and exterior diameters. This claim was rejected upon reference to some earlier oval forms. Applicant then substituted a claim specifying that the interior diameter should be greater than the thickness of the paper roll, that is, less than the difference between the interior and external diameters. Obviously, when this limitation was applied to rolls of oval form, the amended claim was narrower than the original. On the other hand, the amended claim would cover rolls other than those of oval form, and thus in this respect was broader. The action of the Patent Office in allowing and issuing the amended claim was a finding that the invention consisted not in the form of the roll, but in the difference between interior and external diameters, and that by the amended claim the patent was limited to the true invention instead of extending beyond that to all rolls of oval form no matter what the thickness of the paper. Justice Brown therefore was wrong in considering the amended

claim to be broader, and the statement of what the law would be in such case thereupon became a *dictum*.

It is not seen how a case can ever arise where the facts call for the application of the supposed converse rule; but Justice Brown's statement that "the principle is the same" was not well considered. The principle is not the same and the same conclusion is not indicated. When a patentee acquiesces in the rejection of his broad claim, he thereby abandons and dedicates to the public a portion of his originally claimed monopoly. He says to the public, represented by the Patent Office, "If you will give me a part, I will not claim the whole." The Patent Office acts on this representation, and after such action he may not prejudicially withdraw or deny the representation. Thus the principle of estoppel plainly applies. In the converse case, the patentee says to the Patent Office, "Since you are granting me a monopoly of the whole, I do not choose to insist upon a separate grant to a specific form which is a part of the whole." The grant of the whole, the generic claim, does not in any degree depend upon the abandonment of a part, the specific claim. In granting the broad claim the Patent Office action is not based upon the withdrawal of the specific. There is no estoppel.

According to Shepherd's Citations, with reference to the first paragraph of the syllabus, the *Morgan Envelope* case has been cited some seventy times in the Supreme Court Reports and the Federal Reporter. All these citations have been examined,—carefully, we believe, and in all but one the citation had reference to the main rule. No reference whatever to the converse situation is found excepting in one case (*Thomas v. Rocker*, 77 Fed., 420, 431) and in that one the court, after casual approval, held that the abandoned claim had been the broader one, and applied the general rule.

If this dictum of Justice Brown is a fallacy (as in its universality it surely is) it is unfortunate that after nearly fifty years of "innocuous desuetude," it should now be resurrected, and authoritatively pronounced.

BLANK PAGE

BLANK PAGE

FILE COPY

Office - Supreme Court, U. S.
FILED
MAR 3 1941
CHARLES ELMORE CROPLEY
CLERK

In the Supreme Court of the United States

Nos. 9, 10, 11. OCTOBER TERM, 1940.

THE SCHRIBER-SCHROTH COMPANY,
Petitioner,
vs.
THE CLEVELAND TRUST COMPANY, CHRYSLER CORPORATION,
Respondents.
No. 9.

THE ABERDEEN MOTOR SUPPLY COMPANY,
Petitioner,
vs.
THE CLEVELAND TRUST COMPANY, CHRYSLER CORPORATION,
Respondents.
No. 10.

THE F. E. ROWE SALES COMPANY,
Petitioner,
vs.
THE CLEVELAND TRUST COMPANY, CHRYSLER CORPORATION,
Respondents.
No. 11.

MOTION FOR LEAVE TO FILE SECOND PETITION FOR REHEARING and SECOND PETITION FOR REHEARING UPON THE MERITS AND UPON THE MOTIONS TO REMAND.

ARTHUR C. DENISON,
F. O. RICHEY,
WM. C. McCOY,
MILTON TIBBETTS,
Counsel and Solicitors for Respondents.

THE GATES LEGAL PUBLISHING CO., CLEVELAND, OHIO

BLANK PAGE

INDEX.

MOTION FOR LEAVE TO FILE SECOND PETITION FOR REHEARING 1

SECOND PETITION FOR REHEARING—UPON THE MERITS AND UPON THE MOTIONS TO REMAND.. 3

Foreword 4

Preliminary Considerations 4

Argument 7

I. An estoppel arising from an earlier statement or action of the party estopped (accepted by the other party so as to complete the essential agreement) must flow from the expressed or properly implied understanding and intention had, at the time, by the party estopped, as to the meaning of his statement or action. Years afterward, he cannot change his mind and assert that he did have or ought to have had some other intention or understanding, and thereby escape the estoppel which he had created; nor can any court years afterward change his mind for him and find that it had been his legal duty to know that his earlier act then had some meaning or effect different from what he then supposed it had, and so create against him an otherwise non-existing estoppel.. 7

II. The Established Theory of File Wrapper Estoppel Does Not Permit the Use Made of It by the Court in Its Amended Opinion..... 9

III. The Question of Invention is Foreign to the Question of Estoppel..... 15

IV. Deformation Bending and Flexible or Yielding Bending 16

V. Materiality or Immateriality of Differences Between Claims is a Question of Fact..... 17

VI. The Prior Art..... 18

Conclusion 19

Cases Cited.

Aetna v. Kennedy, 301 U. S. 393..... 11

Deitrick v. Greaney, 309 U. S. 190..... 10

Eibel v. Paper Co., 261 U. S. 45.....19, 22

Great Northern v. General Railway, 55 Fed. (2) 457 (C. C. A. 8).....13-14

Hildreth v. Mastoras, 257 U. S. 27..... 19

I. T. S. v. Essex, 272 U. S. 429.....9, 10, 13, 19

Johnston v. Zerbest, 304 U. S. 464..... 11

Morley v. Lancaster, 129 U. S. 263..... 19

Mumm v. Decker, 301 U. S. 168..... 18

Ohio Bell v. Public Utilities, 301 U. S. 292..... 11

Radio v. Radio, 294 U. S. 1..... 18

Smith v. Snow, 294 U. S. 1..... 16

In the Supreme Court of the United States

Nos. 9, 10, 11. OCTOBER TERM, 1940.

THE SCHRIBER-SCHROTH COMPANY, *Petitioner,* vs. THE CLEVELAND TRUST COMPANY, CHRYSLER CORPORATION, *Respondents.*	No. 9.
THE ABERDEEN MOTOR SUPPLY COMPANY, *Petitioner,* vs. THE CLEVELAND TRUST COMPANY, CHRYSLER CORPORATION, *Respondents.*	No. 10.
THE F. E. ROWE SALES COMPANY, *Petitioner,* vs. THE CLEVELAND TRUST COMPANY, CHRYSLER CORPORATION, *Respondents.*	No. 11.

MOTION FOR LEAVE TO FILE SECOND PETITION FOR REHEARING

Now come the respondents in these three cases and respectfully ask that they may have leave to file the attached second petition for rehearing,—both upon the merits and upon the motions to remand.

The reasons which they think justify the granting of this leave are:

1. In these same cases, in June, 1938, this Court provided a precedent by granting to the petitioners in these cases leave to file a second petition for rehearing, though this was many weeks after the first petition had been denied, and though the second petition set up no substantial grounds beyond those which had been set up in the first petition,—while the present proposed second petition is upon grounds not involved in the first petition.

2. The amendment which this Court on February 3 made to its opinion of December 9 placed the conclusion of the Court upon a new and different ground, to which new ground alone the attached second petition is devoted, and as to which new ground the attached petition is in fact the first petition for rehearing.

Dated, February 19, 1941.

ARTHUR C. DENISON,
F. O. RICHEY,
WM. C. MCCOY,
MILTON TIBBETTS,
Counsel for Respondents.

In the Supreme Court of the United States

Nos. 9, 10, 11. OCTOBER TERM, 1940.

THE SCHRIBER-SCHROTH COMPANY, *Petitioner,* vs. THE CLEVELAND TRUST COMPANY, CHRYSLER CORPORATION, *Respondents.*	No. 9.
THE ABERDEEN MOTOR SUPPLY COMPANY, *Petitioner,* vs. THE CLEVELAND TRUST COMPANY, CHRYSLER CORPORATION, *Respondents.*	No. 10.
THE F. E. ROWE SALES COMPANY, *Petitioner,* vs. THE CLEVELAND TRUST COMPANY, CHRYSLER CORPORATION, *Respondents.*	No. 11.

SECOND PETITION FOR REHEARING—UPON THE MERITS AND UPON THE MOTIONS TO REMAND.

To the Said Court:

Now come the respondents in these cases (pursuant to leave to file duly granted) and respectfully present this their second petition for rehearing, as above, praying that this cause be reheard or, in the alternative, that a remand be made for further hearing,—all for the reasons and upon the grounds now to be stated.

FOREWORD.

1. We assume that by its amendment of February 3 this Court did not intend to depart essentially from the basis of its original opinion or to announce any modification of the existing and familiar rules of the law of estoppel; but we hope hereby to demonstrate to the Court that it did make such essential departure, thereby leading to an erroneous application of the law of estoppel.

2. We assume that if the Court be convinced of the probability of this error, it will think proper either to reconsider its opinion of December 9, as amended February 3, or to make such an order of remand that the controlling facts, if they do not sufficiently appear by the present record, may be brought into the record by appropriate further testimony and exhibits.

PRELIMINARY CONSIDERATIONS.

1. The petition for certiorari (p. 8) presented three points only, (1) that because an essential element of the Jardine patented combination was not named in the claim but had been in fact surrendered, these proceedings in the Patent Office operated to make the Jardine patent invalid; (2) that it was error to suppose that web flexibility in operation must have been understood at the time of the supposed Long anticipation to be effectively existent therein; (3) that the nature of plaintiff's title did not permit an injunction.

Though the additional question of invention, as determined by the state of the art, was somewhat discussed orally, the Court, on December 9, apparently accepted the petition-imposed limitations in this situation, decided not to discuss points 2 and 3, and based its opinion entirely upon a question of file wrapper estoppel.

2. In its opinion of December 9 the Court apparently disapproved petitioners' contention that what happened as to *one element* could be controlling, and developed its

own theory[1] that the surrendered claim, as an entirety, was not different (save for "web flexibility") from the allowed claim, and therefore the latter could not be construed as contemplating "web flexibility." The Court declared that it was applying the established rule of file wrapper estoppel, by which a patentee may not recapture, by construction, a combination which he once surrendered. This lack of difference was accomplished by reading into the surrendered claim a number of elements which were named in the allowed claim but were not named in the surrendered claim, so as to eliminate the actual differences. It was not said that these other differences were immaterial; it was said that there were no differences.

3. This rule of estoppel is one of universal application; it has no peculiar basis or modification when it arises from the effect of Patent Office proceedings upon the claim of a patent. **Whatever rule of that law this Court has declared in this case must be considered and accepted by this Court in any future situation, parallel on principle, whether the question arises in any other kind of a contract case, or for that matter, in an equity or a tort case.**

4. In the opinion of December 9 it was assumed by the Court, and remains as the basis of the opinion, that, considering the Jardine specification and the claims in suit, the claims should rightly be interpreted as implying and calling for that kind and degree of "flexibility" which the specification described and showed to be essential to the intended and described operation of the device. It therefore must be accepted, as the basis of all thinking upon the subject matter later presented herein, that the patentee now would be, and at the time of the soliciting and issuing of the patent was, entitled to claim this construction of the language of his allowed claims,—*unless* prevented there-

---

[1] The petitioners based point 1 (p. 8 of petition) upon *Permutit v. Graver*. That case did not involve, nor mention, file wrapper estoppel.

from by estoppel. It will be impossible to repeat this accepted basic theory of construction with every argument hereafter made; we think it is sufficient to state it thus once for all. The Court can not adopt this hypothesis as the basis of discussion, and then let its conclusion rest upon a rejection of this hypothesis.

5. In the opinion of December 9 this Court, in the manner and by the means stated in the foregoing paragraph 3, interpreted the cancelled claim 19-E as coextensive with the allowed claim 8, if the latter were thus construed to embody "web flexibility."

6. Upon the Petition for Rehearing and Motions we not only pointed out the several differences which demonstrated that the two claims were not coextensive, but also pointed out that these differences were material, *structurally, in mode of operation and in results obtained,* not only in fact, but in the opinion and intentions of the parties at the time; and we additionally established this materiality and these contemporaneous views by the affidavits of the two parties to the contract, showing that they were so considered by these parties at the time of the surrender of the cancelled claim.

7. In its amendment of February 3, in referring to these differences, the Court did not question their vital materiality *in structure, operation and results,* but attributed to them *a legal immateriality,* from the standpoint of invention;[2] and thereby substituted its view, ten years

---

[2] The amendment says "in view of such want of invention [lacking web flexibility as found by the C. C. A.] and of the prior art, the only material difference between the amended [surrendered] and the allowed claims is [the one as to web flexibility]." We cannot interpret this otherwise than as meaning that from the standpoint of invention there was no other patentable difference between them,—in other words that, lacking web flexibility, the allowed claim was invalid for lack of invention over the prior art, as exemplified and supplemented by the surrendered claim.

later, and resorted to events and developments long subsequent to the surrender, to give to the surrendered claim a new interpretation which made these differences immaterial, and thereby to remove them from their position as otherwise insuperable obstacles to the rule of estoppel adopted by the Court.

ARGUMENT.

I.

An estoppel arising from an earlier statement or action of the party estopped (accepted by the other party so as to complete the essential agreement) must flow from the expressed or properly implied understanding and intention had, at the time, by the party estopped, as to the meaning of his statement or action. Years afterward, he cannot change his mind and assert that he did have or ought to have had some other intention or understanding, and thereby escape the estoppel which he had created; nor can any court years afterward change his mind for him and find that it had been his legal duty to know that his earlier act then had some meaning or effect different from what he then supposed it had, and so create against him an otherwise non-existing estoppel: This principle will not be questioned. An estoppel exists because the minds of the parties have met upon the meaning of the statement or act in question, and neither one of them can thereafter disavow that meaning, nor can any court do it for them, to make out an estoppel.

The application of the principle to Patent Office proceedings is simple and clear. The patentee, either by an express explanation and declaration in plain words, putting a construction upon his possibly ambiguous claim, or by the declaration implicit in modifying a claim so that it will not be met by a supposed anticipation, puts his construction upon the critical words; the Patent Office accepts this construction and issues the patent; the minds of the par-

ties have met and their agreement has become fixed; the intention and understanding of the patentee as to the meaning and scope of a claim he is cancelling is accepted and adopted by the Patent Office, expressly or by implication; and the meaning and the construction thus adopted by both parties is the only possible basis for a future estoppel as against some other alleged construction or meaning.

To make the application a step more concrete: The Patent Office allows claim A and rejects claim B; applicant acquiesces in the rejection of claim B and accepts claim A as the proper formulation of his allowable invention; there are differences,—several of them,—in structure and in operation between the claims; these were thought and agreed by Jardine and the Commissioner of Patents to be differences indisputably material and important in structure and in operation; one claim describing a practically successful, the other a practically useless, structure; the Patent Office concludes that these differences are material from the standpoint of invention and allows and issues to the applicant a patent with claim A while it issues to another a patent with claim B; the applicant has always contended, and agrees with the conclusion of the Patent Office, that the differences are material from the standpoint of invention and entitle him to a patent upon the invention of claim A; so the minds of the parties meet; the patentee may not thereafter say that claim A should be construed to give him also the structure of claim B; the Patent Office (or the public and whatever the fact about invention may be) may not thereafter say that the patentee had agreed that claim A was not patentably different from claim B; any such contention is in the teeth of the underlying facts.

An illustration:—A was in possession of two white cows, Bessie and Daisy; he made to B a bill of sale conveying "one white cow." Contemporaneous acts or papers

indicate that A intended to sell and B intended to buy Bessie; it later appears that A had a good title to Daisy but not to Bessie, and that his legal duty would have been to convey Daisy in exchange for B's money; but no court would say that, because this had been his legal duty, he would therefore have become estopped to deny that Bessie had actually been the subject of the conveyance. Estoppels operate to compel one to remain bound by an assertion which he did make, even though it were untrue; *an estoppel has never been thought to compel one to adopt an assertion which he did not make.*

II.

The Established Theory of File Wrapper Estoppel Does Not Permit the Use Made of It by the Court in Its Amended Opinion: The whole theory of the construction of claims by file wrapper estoppel is that because the patentee, in order to get his patent, has tied himself to a particular construction of the claim, and the Patent Office has thereupon issued the patent, he is estopped to deny that construction. The controlling thing in finding or not finding such a file wrapper estoppel is the state of mind and the beliefs of both parties to the contract at the time it was made. It cannot be important, on this issue, that some court, many years later, thinks that this joint contemporary view was a mistaken view. (*I. T. S. vs. Essex, post.*)

The Patent Office initially thought that the (earlier equivalent of) allowed claim was patentably different from the amended and later cancelled claim. It evidenced this view by putting the latter into interference and by allowing the former to remain as properly allowed. It confirmed this view by its various rulings on the interference. It later again confirmed this view by issuing a patent on the allowed claim to Jardine and issuing the patent with the cancelled claim to Hartog. In all of this Jardine acquiesced because, upon the Patent Office fact findings, it

was plainly right. The award of one claim to him and another claim to Hartog was made because the office thought, and Jardine thought, that the two claims were patentably different.

Now, because the Court thinks they were not patentably different (if that is what the Court's opinion means) we find that Jardine is estopped,—*not estopped to contradict the Patent Office ruling in which he acquiesced, but estopped to confirm it.*

This Court said in *I. T. S. v. Essex,* 272 U. S. 429, 443:

> "Whether the Examiner was right or wrong in rejecting the original claim, the Court is not to inquire."

The reason, of course, is that the estoppel is predicated upon what was surrendered, whether that surrender was right or wrong. The rule is manifestly applicable here for the same reason, and "the Court is not to inquire" here as to whether the Examiner was right in considering that the allowed claim was "from the standpoint of invention" materially different from the surrendered claim, and this prohibition is because the cancellation of the one and the allowance of the other were predicated upon the presence of what was, rightly or wrongly, thought to be a material difference; and whatever estoppel might exist in the instant case, would have to be based upon this thought, "right or wrong,"—just as in the cited case. The Court would not go back of the intention of the parties in the cited case. For the same reason it should not go beyond the intention of the parties in the case at bar. The patentee, in agreement with the Examiner, made his bed, and it is not to be made over either by the patentee or the Court,—and so this Court held in the cited case.

As an example—from the general law—of the logical limits of estoppel, see the case of *Deitrick v. Greaney,* 309 U. S. 190. There the Court, speaking through Mr. Justice Stone, said (p. 197):

"In a strict and technical sense an estoppel arises only when a misrepresentation has prejudiced another who has relied upon it."

From this viewpoint, would any Court expand the misrepresentation, or give the misrepresentation a wider or different scope than was given it by those parties by whom and to whom the misrepresentation was made?

Time and again this Court has said—

"We do not presume acquiescence in the loss of fundamental rights."

(See *Ohio Bell v. Public Utilities*, 301 U. S. 292, 307.) To the same effect is the statement by the Court at page 304 U. S. 464 (*Johnston v. Zerbest*) with citation to cases. See also *Aetna v. Kennedy*, 301 U. S. 393.

Having shown that the differences between the cancelled claim and the amended claim (other than the word "flexible") were material differences, how, in the face of these rules, is it proper to presume or construe them to be immaterial? Clearly the decisions of this Court which we have recited take the reverse view, that is, they have refused and frowned upon presumptions and interpretations which strike down a fundamental right such as that of Jardine to a patent upon his invention.

In the ordinary file wrapper estoppel the patentee is forbidden to contend that the difference between the cancelled and the allowed claims was immaterial, and so to recapture what was surrendered. The Court now does what the patentee could not do, and then declares the patentee to have become estopped by what he did not do.

If the view taken by this Court in its amended opinion regarding the immateriality of the differences (if flexibility be implied in the allowed claim) between the cancelled and allowed claims had obtained during the Patent Office proceedings and the cancellation (whereby the cancelled claims would have called for the structure and limitations

of the allowed claims), the following would inevitably have happened:

(a) These cancelled claims would never have been cancelled, because the other parties to the interference could not have made them, and the reasons for rejecting them would not have prevailed.

(b) Either the Patent Office would never have declared the interference or, if it had been declared, it would have been dissolved because the other parties to the interference could not have made the claims, and the cancelled claims would have been allowed to Jardine. It was only because of the material difference between the cancelled claims and the allowed claims that the cancelled claims were not allowed to Jardine and the allowed claims were allowed to him. These were the terms under which the surrender was made. To modify those terms more than ten years after they were cancelled changes the conditions under which they were surrendered.

(c) If somehow (though we can not conceive how) there had been an interference and the cancelled claim (construed as this Court now construes it), had been lost by Jardine, the Patent Office would never have given the allowed claims to Jardine, but he would have had an opportunity to select for his claims words and language beyond the ability of any to construe them as coextensive with, or no more than immaterially different from, the cancelled claims.

(d) The allowed claims would have been suggested by the Patent Office to the other parties to the interference, who would have made them and such allowed claims would then have been included in the interference.

(e) Jardine would have prevailed in the interference against all of the parties because he is the prior inventor of the subject-matter of the allowed claims.

(f) Jardine would have pursued his remedy by appeal from a holding predicated upon any such proposition as

the Court now adopts. To now construe as immaterial differences, then believed to be, held to be, and acted upon as material, would retroactively oust Jardine from his right to appeal. Every file wrapper estoppel is predicated upon the failure to pursue the remedy by appeal (*I. T. S. v. Essex*, 272 U. S. 429, 443).

We cite these instances not only to show the materiality of the differences between the claims, as the Patent Office and all the parties to the interference viewed them, but to emphasize the injustice of an *ex post facto* modification of what Jardine surrendered.

Indeed, it becomes manifest that very few, if any, patents would be worth the paper on which they are written if claims once made had been cancelled and if the Courts could, in the light of events occurring after the surrender, construe the surrender to be different from what was intended to be surrendered, and to be coextensive in substance with what was granted. Such a proceedings not only strikes down the inventor and his patent, but disparages the Government tribunal which was a party to the allowance of the grant which it made on condition of the surrender of a certain thing as then definitely understood,—which ought not to be later changed by construction to be something different.

The injustice and the evil do not end with the inventor and the Patent Office. They extend to counsel for the inventor, who are expected by the Court, and whose duty as officers of the Court it is, to limit the issues for consideration by the Court. In this case substantially all of the claims of the Jardine patent are infringed. Originally reliance was had upon claims 1, 2, and 4 to 11, inclusive (R. p. 34), a total of ten claims. The Master commented upon the burden placed upon the Courts by a reliance upon so many claims. Although all are infringed, we felt it was our duty to the Courts to limit the number of claims to be considered by reviewing Courts to relieve the burden upon such courts. The practice stated in *Great Northern v.*

General Railway, 55 Fed. (2) 457 (C. C. A. 8) presented us with the opportunity to do this without sacrificing any of the rights of our clients. It never occurring to us that the subject-matter surrendered by Jardine in the Patent Office would be construed in the light of later events—later even than our selection—to be something that it was not at the time it was surrendered, we limited the claims that might, under the circumstances, be considered by the reviewing Court in the light of the doctrine of the cited case, to claims 1, 8, and 11, though these were by no means the narrowest claims which were infringed. Other claims, such as claims 2 and 6, for example, contain further limitations and could not be construed as coextensive with or no more than immaterially different from the surrendered claims, even in the light of the opinion of the Court of Appeals and the prior art referred to by this Court in its amended opinion. If, therefore, this Court adheres to its amended opinion that the differences between the cancelled claims and claims 1, 8 and 11 of the Jardine patent are immaterial in the light of these subsequent events, we submit that justice requires the Court to remand the cause to the Court of Appeals that we, as counsel who selected the claims 1, 8, and 11 to lighten the work of the Courts, may have an opportunity to make a reselection in the light of the rule which this Court will have made, to the effect that the scope of the surrendered matter may be modified by construction in the light of subsequent events. The reasonableness of this request is sustained by the holding of all the Courts, who inferentially ruled, that the difference was material and by the absence of any holding that it was immaterial. The request is further made reasonable by the fact that the question of whether the differences between the claims is material or immaterial is necessarily a question of fact which has never been placed in issue and upon which evidence has never been taken and which has never been briefed or argued in any court.

That we did not by this selection of claims abandon the charges under the other claims of the Jardine patent originally relied upon and that we preserved our right to return to the others, is set forth in one of our briefs before the Court of Appeals when the selection was first made, as follows:

> "Many claims were allowed in the patents in suit after long prosecutions and many interferences. (*G. E. v. Save*, 82 Fed. (2) 100-103 (C. C. A. 6).) It seems impossible to get just the right number of claims in a patent, or in a patent suit, to suit everybody. Flagrant duplication of plaintiffs' licensees' whole line of pistons covered by the patents in suit, and the frequent injection of infringing pistons into the suit by defendants, made it necessary to rely originally upon a large number of claims. When the number and character of the infringing devices involved finally became static, we grouped the claims in accordance with the practice announced in *Great Northern v. General Railway*, 57 Fed. (2) 457 (C. C. A. 8)."

III.

The Question of Invention is Foreign to the Question of Estoppel: The differences (plus flexibility) between cancelled and allowed claims were either material or immaterial. The Patent Office and Jardine and the other interferants thought them material. This Court, in its amended opinion, thought them immaterial. Since their actual physical differences, in structure and operation and results, were beyond doubt important, the Court finds and applies another factor—"lack of invention in the allowed claim, absent flexibility." The "prior art" also referred to in the amended opinion could have been no more than the prior art in this record on which the Court below had based its finding and hence adds nothing to that finding.

So we find the Court inferring that *because* the allowed claim was patentable only if it implied flexibility, *therefore* all its several express differences from the cancelled claim

were immaterial to a decision of the question of estoppel. We submit, with all deference, that this is *non sequitur* upon which the Court will not be content to let its amended opinion rest.

The opposite conclusion seems more forceful. If indeed there were inconsistency between the cancellation of the amended claim and the allowance and issue of claim 8 (construed with flexibility as the specification requires) then the allowance and issue, being later, would prevail. This is the doctrine of *Smith v. Snow*, 294 U. S. 1, 16 (opinion by Mr. Justice Stone). A narrower claim had been rejected, with acquiescence by applicant, who later secured a broader claim, which this Court sustained, as having superseded the earlier action.

IV.

Deformation Bending and Flexible or Yielding Bending: We have, in each of our briefs in this Court, urged, and at page 7 of our green brief (Respondents' Reply Brief on the Motions to Remand and Petition for Rehearing) illustrated the action of "deformation" bending described in the Jardine patent (p. 1, ll. 21-28). This deformation bending results in an operation and the achievement of merits including the balanced skirt flexibility of which the parties to the interference, Long, Hartog and Spillman, were incapable since the bending in the parts of their pistons is merely the common flexing or yielding bending recited in the cancelled claims. *No cancelled claim recited this "deformation" bending.* No language of any cancelled claim could be construed to mean the "deformation" bending because to have so construed it would have been to make it impossible to read upon structures of the other parties to the interference. Since Jardine must construe his claims in the light of his specifications, his webs must be construed as bending by "deformation and deflection." Thus the difference between the surrendered and allowed

claims includes a difference in the character of the bending and even though Jardine may have surrendered a claim reciting the yielding or flexing bending generally or broadly, he never surrendered a claim reciting, or which could be construed as reciting, a "deformation" bending.

Or perhaps the proposition could be better understood if looked at from the following standpoint:

The Jardine webs are capable of both (1) the broad flexing or yielding bending and (2) the "deformation" bending. The parts of the pistons of Long, Spillman and Hartog were incapable of the latter or deformation bending. If it be assumed that Jardine surrendered the broad yielding or flexing bending, or any combinations including that feature, he never surrendered the "deformation" bending or any combination claim either including that feature or into which that feature might be construed. Since, under the law of this case and under the general rule, Jardine's claims must be construed in the light of his specification, they must be construed as including the "deformation" bending as well as the yielding or flexing bending, and as so construed they would not be coextensive with any surrendered claim for the reason, *inter alia*, that they would be limited to the "deformation" bending.

The record shows that this feature is present in Jardine and in the accused pistons, Exhibit 1, along with the other features (R. pp. 37-41).

V.

Materiality or Immateriality of Differences Between Claims is a Question of Fact: Time and again this Court has said that claims cannot be construed on the basis of the words of the claims. Time and again this Court has said that claims must be construed in the light of what is done by the structures the claims describe and how they do it. The cancelled claims describe the structures of Spillman, Hartog and Long, all of which operated and per-

formed so differently from Jardine that they failed where Jardine succeeded. The allowed claims describe Jardine, but do not describe any one of the pistons of Long, Spillman or Hartog. The Patent Office considered that the difference between the allowed and the cancelled claims was so great that the allowed claims were patentable to Jardine and the other claims were not. Thus there is presented a fact issue here with a judicial holding to sustain the *prima facie* materiality of the differences between the claims. (*Mumm v. Decker*, 301 U. S. 168; *Radio v. Radio*, 294 U. S. 1.) Moreover, the Patent Office is the only tribunal which has ever been presented with this issue, the evidence on the same, and which has ever been confronted with the reasons for deciding it one way or the other.

Therefore, before this fact issue can be considered by this Court, at least to the extent of reversing the *prima facie* conclusion of the Patent Office, the question should be presented as an issue to the trial Court, evidence submitted upon it, arguments and briefs had and a decision by the trial Court on the question which should be brought up to this Court for review.

As the matter now stands this Court has decided this question, which is essentially and fundamentally a question of fact, contrary to and overruling the Patent Office and without evidence upon the question or without a decision below which this Court could properly review.

VI.

The Prior Art mentioned in the amendment to this Court's opinion is not named and, therefore, we cannot deal with it directly.

It must, of course, be either the prior art that was before the Patent Office at the time of the surrender of the cancelled claim and the making of the allowed claim or prior art which was not before the Patent Office and the solicitor at that time.

If it was the former, the Court will not, on the file wrapper proceedings, consider whether the action of the Patent Office with respect to the prior art was right or wrong. (*I. T. S. v. Essex, supra.*)

If it was prior art not before the Patent Office and the solicitor it manifestly cannot be considered in construing what was surrendered, any more than any other fact which was not before the parties at the time of the surrender, because to do so would give to the cancelled claim a construction not intended to be given to it at the time of the surrender, and resulting in attributing to Jardine the surrender of something which he did not surrender.

Conclusion: The Jardine invention stands before this Court as an invention of great merit. The holding of the Court of Appeals was that it was an invention of great merit advancing the art so substantially that it was the first solution of the aluminum piston problem which had, for years, baffled those most skilled in this art in this country and abroad, and which had not been solved by all of their efforts. That finding was not challenged by the Petition for Certiorari and is not here for review. We assume that the Court will accept the views of the Court of Appeals upon that subject, as it has accepted the view of the Court of Appeals that there was no invention in the Jardine claims "absent the flexible web element." The evidence of the defendant, as well as that of the plaintiff, supports the finding of the Court of Appeals on the presence of invention and its great merit.

Under such circumstances the Courts will, as this Court has time and again said, be "liberal in its construction of the patent to secure to the inventor the reward he deserves" (*Eibel v. Paper Co.*, 261 U. S. 45, 63; *Morley v. Lancaster*, 129 U. S. 263, 273; *Hildreth v. Mastoras*, 257 U. S. 27, 36). This is no more than the broad equity rule that where one has contributed substantially to the bene-

fits of his fellow men, his fellow men will not be dialectic or squeamish with him.

Would it not seem that it is time to take stock to see whether or not Jardine, the inventor of a meritorious invention, is being treated with that liberality which this Court has always proclaimed it would mete out to those who make meritorious inventions.

A review of the progress of this invention through this Court leads to the conclusion that it is time to contemplate the rule which we have cited. The progress through this Court is as follows:

(1) There was a controversy through the lower Courts on the question of whether the original Gulick application used the word "rigid," in describing a property of the webs, as referring to the vertical or the horizontal. Three Courts of Appeals, including in all thirteen Judges, decided that the reference in the specification was to the vertical. This Court disagreed with them, and held that the amendment to that effect was improper.

(2) It was also urged through all of these Courts that since flexibility was inherent in the webs of Gulick they should be so construed and both the defendants' and the plaintiffs' experts testified that no one making a piston such as disclosed in the Gulick patent could make the piston otherwise than with a flexible web, if any metal available for piston use was employed. The three Courts of Appeals below agreed with this. This Court disagreed.

(3) The same thing was urged with respect to the Maynard patent for the same reason, and this Court still held the disclosure insufficient to teach those skilled in the art.

(4) We then pointed out that Gulick and Maynard claims were valid nevertheless since they recited the webs. This Court then remanded the case to the Court of Appeals to decide this question and also, *inter alia*, the question of the validity of the Jardine patent.

(5) Since it was impossible to say the Gulick and Maynard webs were neutral, the Court of Appeals either had to construe them as flexible or as rigid, and having been forbidden by this Court, as that Court thought, to construe them as flexible the Court of Appeals construed them as rigid, though that was just as much a violation of the rule made by this Court as the construction that they were flexible.

(6) On the Jardine patent the Court of Appeals held, according to a well established principle of law and of contracts, that since one part of a contract could be construed in the light of another part, the claim could be construed in the light of the Jardine specification.

(7) Both parties applied to this Court for Certiorari. Although the question of construing rigidity into the Gulick claims was a novel one, and the question of construing the Jardine claim in the light of the specification was an old and familiar one, this Court denied the Petition for Certiorari on the former and granted the Petition for Certiorari on the latter.

(8) In its Petition for Certiorari on the Jardine patent, petitioners under Point I raised two questions of patent law, as follows:

(a) If a party cancels a claim which includes, as one of several features, a particular one i.e., flexible, can that party later construe a different and allowed claim, in the light of his specification, so as to include that particular feature?

(b) Could Jardine construe his claim in the light of the specification to say that the web was flexible?

(9) This Court rejected both of these propositions, deciding the case on the ground that the cancelled and the rejected claims should be construed as co-extensive except for the term "flexible," notwithstanding differences in the claims. We responded by showing that to do this would

do violence to what had been agreed upon at the time between the Patent Office Examiner and the solicitor and give the cancelled claim a construction that it could not possibly have had in the light of the fact that it was construed to read upon the applications of Long, Spillman and Hartog.

(10) This Court then amended its opinion to hold that in the light of subsequent events and certain prior art, which was not named, the differences between the claims must be construed as immaterial, thus, as we point out herein, changing by construction the thing that was surrendered to create out of whole cloth a claim which was never surrendered.

We live in an age of great reforms most, if not all, of which are predicated upon the more equitable distribution of wealth, comforts, benefits, etc. Few, if any, of the things which these reforms seek to distribute were available a century ago. The man who worked on the Boulder Dam was four thousand times as strong as the man who worked on the Great Pyramid; the same relation existed three hundred years ago; it was little changed one hundred and fifty years ago. Why these differences? Why do we have these emoluments to distribute today? The answer is that tools, etc. have been invented which made the man on the Boulder Dam four thousand times stronger than the man on the Great Pyramid. Substantially all of these tools, etc. have been invented since the early part of the last century when the Courts for the first time began to apply the rule stated by this Court in *Eibel v. Paper Company* and other decisions, cited *supra*.

Should those who invent and produce the tools, etc. which produce the emoluments available for distribution in these reforms be treated captiously? Certainly not under the prior decisions of this Court which we have cited!

In view of all of these things it would seem that the Court should—

(1) Remand the cause to the District Court with directions to take evidence upon, consider and decide the questions which this Court has raised for the first time, and which we have enumerated in the proceedings since the coming down of the first opinion of this Court;

(2) Grant a rehearing that the Court may consider the case free from the propositions which have been taken into consideration in rendering the opinion and the amended opinion and which matters were neither placed in issue, submitted to trial, or decided below;—or

(3) Dismiss the writ, because the former controversy is now moot. Whether the defendants should pay some damages is not a question of public interest. No question of public interest remains,—unless it is the question whether the Court has inadvertently and unduly modified the general law of estoppel.

Respectfully submitted,

ARTHUR C. DENISON,
F. O. RICHEY,
WM. C. MCCOY,
MILTON TIBBETTS,
Counsel and Solicitors for Respondents.

February 19, 1941.

We hereby certify that the foregoing petition for rehearing is presented in good faith and not for delay.

ARTHUR C. DENISON,
F. O. RICHEY,
WM. C. MCCOY,
MILTON TIBBETTS,
Counsel and Solicitors for Respondents.

BLANK PAGE

pp. 5, 6. 1, 2, 3, 9

SUPREME COURT OF THE UNITED STATES.

Nos. 9, 10, 11.—OCTOBER TERM, 1940.

The Schriber-Schroth Company, Petitioner, vs. The Cleveland Trust Company, Chrysler Corporation.	On Writs of Certiorari to the United States Circuit Court of Appeals for the Sixth Circuit.
The Aberdeen Motor Supply Company, Petitioner, vs. The Cleveland Trust Company, Chrysler Corporation.	
The F. E. Rowe Sales Company, Petitioner, vs. The Cleveland Trust Company, Chrysler Corporation.	

[December 9, 1940.]

Mr. Justice STONE delivered the opinion of the Court.

Decision in these cases turns on the question whether, in the light of the patent office history of the Jardine patent on a piston for gas engines, the court below, in construing the specifications and claims, erroneously included one element, "flexible" or "yielding" webs in the patented combination.

A related question was considered by this Court in connection with the Gulick and Maynard patents, also involved in this litigation, in *Schriber-Schroth Company* v. *Cleveland Trust Co.*, 305 U. S. 47. Respondent, the assignee in trust under a pooling agreement of some eighty patents relating to pistons for gas engines. It brought suit in the district court for northern Ohio against petitioners, three piston dealers, customers of the Sterling Products Company, to restrain infringement of five of the patents, including the Gulick patent No. 1,815,783, applied for November 30, 1917 and allowed July 31, 1931, the Jardine patent, No. 1,763,523, applied for March 11, 1920 and allowed June 10, 1930, and

the Cleveland Trust Co.

the Maynard patent No. 1,655.968, applied for January 3, 1921 and allowed June 10, 1928.

The cases were consolidated and tried before a special master who, upon the basis of elaborate special findings, concluded that the Gulick patent was invalid because of want of invention and because of the addition to the application by amendment in 1922 of a new element of the alleged invention; that the Maynard patent was invalid for want of invention and for failure to describe and claim the alleged invention, and that the Jardine patent was invalid as not showing invention over the prior art exhibited by Ricardo, Franquist and Long. He held the other patents invalid for reasons not now material.

The district court adopted the master's findings and gave its decree for petitioners. The court of appeals reversed as to two of the five patents, holding the Gulick and Maynard patents valid and infringed. 92 F. (2d) 330. The elements of the combination as stated in claim 39, ~~one of several claims~~ of the Gulick patent ~~which the court sustained~~, are:

> "A piston for an engine cylinder comprising a skirt, a head separated from the skirt wall around its entire periphery, said skirt being longitudinally split to render the skirt wall yieldable on every diameter in response to cylinder wall pressure, wrist pin bosses, and means rigidly connecting said bosses to the head and yieldingly connecting said bosses to the skirt whereby said skirt is yieldable in response to cylinder wall pressure."

References to a combination, including with other elements web connections "whereby said piston skirt is rendered yieldable during operation in response to cylinder wall pressure" appears in number 18, ~~another~~ one of the sustained claims.

The court of appeals found invention in both the Gulick and Maynard patents, in a combination of elements of which one was "webs laterally flexible", which was not specifically described or claimed in the Gulick patent before its amendment of 1922 and was never so described or claimed in the Maynard patent.

Conceding that other elements in the combinations were old in the piston art it said: "But to combine insulation of head from skirt, retraction of the bosses from the skirt periphery, connection of such bosses to the skirt with webs laterally flexible and yet so carried from the head as to support the load upon the wrist pin

with sufficient strength and rigidity, and to utilize the mechanical force of the cylinder wall upon the skirt and the thermal expansion of the bosses so as to compensate evenly and fully for head expansion and to secure a balanced flexibility of the skirt with no bending concentration at any point therein, discloses, we think a meritorious concept beyond the reach of those skilled in the art". 92 F. (2d) at 334.

Upon an examination of the Gulick application before amendment and the Maynard patent we concluded, 305 U. S. 47, that neither described or claimed flexible or yieldable webs as an element in the patented inventions. For that reason alone we held that if the flexible web constituted an essential element of the inventions both patents failed to satisfy the requirement of the statute that the patentee describe his invention so that others may construct and use it after the expiration of the patent and that it "inform the public during the life of the patent of the limits of the monopoly asserted, so that it may be known which features may be safely used or manufactured without a license and which may not." *Permutit Co.* v. *Graver Corp.*, 284 U. S. 52, 60; that consequently the patent monopoly did not extend beyond the invention described and explained by the patent as the statute requires and could not be enlarged by amendment so as to embrace in the invention an element not described or claimed in the application as filed, at least when adverse rights of the public had intervened. See *Schriber-Schroth Co.* v. *Cleveland Trust Co., supra*, 57.

Upon the remand the court of appeals held in the present suit, *Schriber-Schroth Co.* v. *Cleveland Trust Co.*, 108 F. (2d) 109, that the elements of the combination described and claimed in the Gulick patent before amendment and in the Maynard patent without including the flexible web element which was added only by amendment to the Gulick patent, did not disclose invention over the prior art. But considering that the flexible web element which had not been included in the combination patented by Gulick and Maynard had been described and claimed in the Jardine patent, it recalled its mandate to the district court by which it had directed dismissal of the suit brought on that patent. See *Schriber-Schroth Co.* v. *Cleveland Trust Co., supra*, 112, 113. Upon an examination of the Jardine specifications and claims it found there described and claimed the invention which it had previously

without prejudice

found in Gulick and Maynard, but which this Court had found the patentees had failed to describe and claim in their applications.

The Jardine claims, 1, 8 and 11, which it sustained, recite the webs as an element but do not describe them as flexible or point to flexibility as an element in the invention claimed. But in the specifications of the patent, which so far as now material appeared in Jardine's application describing the invention, he makes specific reference to the webs constructed in such proportions as to enable them to "bend" in response to the reaction force of the cylinder wall on the outer faces of the guide segments as the piston expands, and to the cooperation of the "bending" web with the thermal expansion of the guide part of the piston without a corresponding increase in its outer diameter.[1] He explained the principle of his device saying, "I have found that these difficulties can be overcome by constructing a piston with its skirt or guide portion supported and slotted or divided in a manner to permit deformation and deflection of parts thereof without interfering with the performance of the essential functions of the respective parts."

Reading specifications and claims together, the Court of Appeals interpreted the latter as incorporating the element of web flexibility in the combination claimed and concluded that Jardine had explained and claimed "the principle of operation of his machine and the flexibility of its webs". It said that "the knowledge that was not Gulick's or was by him concealed is clear to Jardine and by him proclaimed." It held the Jardine patent valid and infringed as it had found Gulick infringed in its earlier decision.

We granted certiorari, 309 U. S. 648, on a petition which raised, among others, the question whether the court of appeals had misin-

[1] An excerpt from the Jardine Specifications reads:

"The webs 6 and guide segments preferably are so designed that this displacement of the segments 10, 10^a, is permitted by virtue of a bending of the webs 6 at points remote from the guide segments. To this end, as shown in Fig. 4, the thickness of the guide segments is increased toward the webs 6 and the webs 6 are decreased in thickness from the guide portions inward toward the bosses to points in line with the inner ends of the slots 11^a. This gives in effect a cantilever structure weakest at its support, . . . Thus the reaction force of the cylinder wall on the outer faces of the guide segments as the piston expands tends to cause bending of the webs 6 along said lines 13. Due to the bending of the web sections 6 and the forcing together of each pair of segments, the guide part of the piston may undergo a considerable thermal expansion without a corresponding increase in the outer diameter thereof and thus a small initial clearance can be used without danger of scoring or seizure of the piston."

terpreted or unduly limited this Court's earlier decision in this case and its decision in *Permutit Co.* v. *Graver Corp., supra,* by refusing to hold a patent invalid where a feature found to be an essential element of the patented combination was not mentioned in the claims of the patent and was in fact surrendered during the prosecution of the application and after adverse decisions in interferences.[2]

The claims of a patent are always to be read or interpreted in the light of its specifications, *Hogg* v. *Emerson,* 11 How. 587; *Carnegie Steel Co.* v. *Cambria Iron Co.,* 185 U. S. 403; *Smith* v. *Snow,* 294 U. S. 1; and we may assume that if in the present case the specifications and claims of the patent were to be interpreted without reference to its file wrapper history, the webs referred to in the claims are the webs described in the specifications as capable of bending in cooperation with the slotted piston guides or skirts so as to compensate for thermal expansion and so supply the element of webs laterally flexible which was wanting to Gulick and to Maynard. But the particular invention to which the patentee has made claim in conformity to the statute is not always to be ascertained from an inspection of the specifications and claims of the patent alone. Where the patentee in the course of his application in the patent office has, by amendment, cancelled or surrendered claims, those which are allowed are to be read in the light of those abandoned and an abandoned claim cannot be revived and restored to the patent by reading it by construction into the claims which are allowed. Hence, petitioner argues, the effect to be given to the omission from the Jardine claims of any reference to the flexible web feature, which the court below thought distinguished his alleged invention from that of the Gulick and Maynard patents, cannot rightly be determined without some examination of the claims pointing to flexible webs as a feature of his invention, which Jardine added to his application by amendment and later surrendered as a result of interference proceedings in the patent office.

[2] A question raised by the petition for certiorari was whether respondent could prosecute its suit for injunction in the absence, as a party, of the licensee to whom respondent had granted the exclusive right to manufacture, under the patents in question, aluminum pistons, the only field in which concededly the patent has present practical utility. The special master found against petitioners on this point and no exceptions were taken to his finding, nor was the point argued when the case was first before the circuit court of appeals and this court. The court below thought that in view of these circumstances the right of respondents to an injunction was no longer an issue. We do not here pass on the question since we find that, in any case, for reasons appearing in the opinion, no injunction should issue.

The Jardine patent was described as of the slipper type of piston although not limited to that type, the skirt consisting of two separated parts circumferentially separated from the piston head, supported by the webs which connect the skirt or slippers with the piston head and support wrist pin bosses from which the skirt is retracted or cut away. The claims of the Jardine application as filed or later amended and ultimately allowed made no reference to the webs as flexible, yielding, or resilient, which the court of appeals found, when cooperating with other structural elements, to be a distinguishing feature of Jardine's invention. Claim 8 of the Jardine patent, which is typical of the three which the court below sustained, reads:

> "In a piston for an internal combustion engine, the combination of a head having a cylindical ring flange, oppositely disclosed webs integral with the flange and carrying diametrically opposite piston pin bosses, and skirt integral with said webs and cut away to expose the sides of said webs and separated from the ring flange by circumferential slits and provided with a longitudinal slit disposed between the ends of the webs."

Claims 5 and 6 refer to the "skirt portion cut away from the head to expose the bosses."

While the application was pending Jardine amended his claims so as to supply this omission. In various forms he claimed the ~~cylinder~~ piston head, skirt and web combination with ~~cylinder~~ piston head separated at its flange or periphery from the skirt, the skirt slotted or separated into parts and connected with the head by the webs, variously described as "yielding ribs", "resilient arms", "skirt carriers . . . susceptible of being slightly flexed radially" or as "joining means being resiliently yieldable", or as "means for yieldingly connecting the said skirt section with said head". These claims, as a result of being thrown into interference with Hartog, No. 1,842,022, applied for February 16, 1920, allowed January 19, 1932, and in some instances with Gulick and with Long, No. 1,872,772, applied for March 7, 1919, allowed August 23, 1932, were rejected by the patent office. Jardine then withdrew all of these amendments. Of these amended and cancelled claims, Claim 18 [19 E] is typical. It reads as follows:

> "In a piston of the class described, a cup-like head comprising a pressure receiving end and a wall portion, a skirt, circumferentially disconnected from the wall portion of the head and divided from end to end, and skirt carriers connecting said

skirt to the pressure receiving end, said skirt carriers being disconnected from the wall portion of the head and susceptible of being slightly flexed radially."

Upon comparison of the withdrawn claim with Claim 8 of the patent as allowed it will be observed that both are combination claims for a piston having a head, a divided or slotted skirt disconnected from the wall portion of the head and connected with the head by ribs, webs or skirt carriers. The only material difference in view of what has been said to be the invention is the statement in the withdrawn claims that the skirt carriers (webs) are "susceptible of being slightly flexed radially" or the like. Whatever would have been the proper construction of the claims as allowed, read in the light of the specifications alone, there being no amendments, the question now presented is whether in view of the amendments and their withdrawal the patent can rightly be construed as including the flexible webs in the claim allowed.

In addition to the fact of the cancellation of the only claims specifying flexing webs or their equivalents as a feature of the invention, it is to be noted that at no time during the prosecution of the Jardine application did he urge that he was the inventor of a piston having flexible webs. Before the interferences and in distinguishing his invention from the Ricardo piston, Jardine urged as his only advance over Ricardo the addition of the slotted skirt which "changes the structure and the resistance to a disposal of the forces within and without the piston when the piston is in use", although in this litigation it is contended that the Ricardo patent did not disclose flexing webs. In submitting the final amendment cancelling the flexible web claims in interference and presenting the claims 8 and 11 of the Jardine patent held valid by the court below, there is no mention of flexing webs, the features stressed being in the case of Claim 8 that the webs are integral with the ring flange and in the case of Claim 11 that the webs are integral with the flange and extend "convergingly inwardly" therefrom.

It is a rule of patent construction consistently observed that a claim in a patent as allowed must be read and interpreted with reference to claims that have been cancelled or rejected and the claims allowed cannot by construction be read to cover what was thus eliminated from the patent. *Shepard* v. *Carrigan*, 116 U. S. 593; *Sutter* v. *Robinson*, 119 U. S. 530; *Roemer* v. *Peddie*, 132 U. S. 313; *Phoenix Caster*

Co. v. *Spiegel*, 133 U. S. 360; *Hubbell* v. *United States*, 179 U. S. 77; *Weber Electric Co.* v. *E. H. Freeman Electric Co.*, 256 U. S. 668; *I. T. S. Rubber Co.* v. *Essex Rubber Co.*, 272 U. S. 429, 443. The patentee may not, by resort to the doctrine of equivalents, give to an allowed claim a scope which it might have had without the amendments, the cancellation of which amounts to a disclaimer. *Smith* v. *Magic City Club*, 282 U. S. 784, 790; *Weber Electric Co.* v. *E. H. Freeman Electric Co.*, *supra*, 677, 678; *I. T. S. Rubber Co.* v. *Essex Rubber Co.*, *supra*, 444. The injurious consequences to the public and to inventors and patent applicants if patentees were thus permitted to revive cancelled or rejected claims and restore them to their patents are manifest. See *Leggett* v. *Avery*, 101 U. S. 256, 259.

True, the rule is most frequently invoked when the original and cancelled claim is broader than that allowed, but the rule and the reason for it are the same if the cancelled or rejected claim be narrower. *Morgan Envelope Co.* v. *Albany Paper Co.*, 152 U. S. 425, 429; *Wm. B. Scaife & Sons* v. *Falls City Woolen Mills Co.*, 209 Fed. 210, 213; see *Computing Scale Co.* v. *Automatic Scale Co.*, 204 U. S. 609, 620, 621; cf. in case of disclaimer *Altoona Theatre Co.* v. *Tri-Ergon Corp.*, 294 U. S. 477, 492, 493.

In view of the prior art which precluded, as the court below held, invention in Gulick and Maynard, absent the flexible webs, and in Jardine without the inclusion of the surrendered flexible web feature in the patented combination, it does not appear why the patent office allowed the broad claims after rejecting the narrower ones. But in any case the patentee, having acquiesced in their rejection, is no longer free to gain the supposed advantage of the rejected claims by a construction of the allowed claims as equivalent to them. *Morgan Envelope Co.* v. *Albany Paper Co.*, *supra*.

The application of that principle in the present case is not foreclosed as respondent suggests because the combination of elements surrendered differs from the combination which the court below found to be preserved in the allowed claims and in which it found invention. The combination which it found to be preserved in Jardine's claims was "a combination with balanced skirt flexibility due to cooperation of longitudinal and vertical slotting with flexing webs supporting retracted bosses and connected to a skirt thereby made responsive to physical compression and thermal expansion so

as to permit of minute clearances between piston and cylinder, a concept perceived in Gulick as amended and minus amendment no longer perceived." 108 F. (2d) 114.

But the amended and cancelled claims are to be read in the light of the specifications. So read cancelled claim 18 [19 E] already quoted claims a piston "of the class described" and embraces the combination in which the court below found invention, longitudinal and vertical slotting, flexing webs supporting "retracted bosses" and connected to a skirt thereby made responsive to physical compression and thermal expansion. True the amended and cancelled claim and allowed claims 1, 8 and 11 did not specifically mention retraction of the skirt from the bosses. Nor did either the amended claims or the allowed claims specify balanced skirt flexibility due to cooperation of the parts. For them recourse must be had to the specifications and drawings in which the court below found the elements of the invention which it described found the elements of the invention which it described but in which, absent the flexible webb element, it found no invention. In view of such want of invention and of the prior art the only material difference between the amended and the allowed claims is the presence in the former of the flexible webb element and, in consequence of the surrender of the former particularizing sed invention if the flexible web feature had not been surrendered. Without it the court below concluded that Jardine, like Gulick and Maynard, disclosed no invention. It rejected the Schmiedeknecht patent, No. 1,256,265, one of those in suit, on like grounds, saying, "It discloses no web flexibility cooperating with other elements of resiliency to achieve the balanced flexibility perceived in Jardine on the basis of which alone the latter is thought to be valid . . ." We accept this conclusion as supported by the evidence of the prior art in the master's findings and the only one which could be reached consistently with the decision below with respect to the Gulick and Maynard patents which stand adjudged as invalid.

Reversed.

Mr. Justice McReynolds and Mr. Justice Roberts took no part in the consideration or decision of this case.